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SAE AS81914/2

FEDERAL SUPPLY CLASS
9330

RATIONALE

REVISION IS REQUIRED TO CORRECT THE TABLE 1 METRIC EQUIVALENT VALUE FOR APPROX. WEIGHT, THE DASH # 13 WEIGHT OF 26.0 POUNDS, DASH #S 10 AND 11, MIN BEND RADIUS/METRIC EQUIVALENT – 1.125 (28.58) AND 1.125 (28.58), TABLE 3, PAGE 3, "PROPERTY" COLUMN, HEAT SHOCK REQUIREMENT – 235/229°C (455/445°F) FOR 4 HOURS. 10% MAX. LONGITUDINAL CHANGE. NO DRIPPING, FLOWING OR CRACKING.

NOTICE

THE REQUIREMENTS FOR ACQUIRING THE TUBING DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE IN EFFECT OF SAE AS81914.

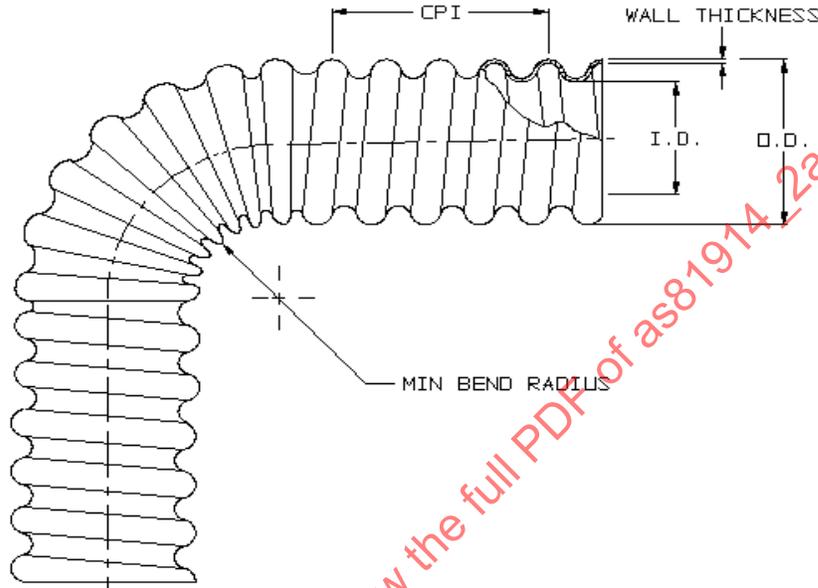


FIGURE 1 – DIMENSIONS AND CONFIGURATION

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CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS81914

SAE Aerospace
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AEROSPACE STANDARD

TUBING, PLASTIC, EXTRA FLEXIBLE, CONVOLUTED
HELICAL, POLYTETRAFLUOROETHYLENE (PTFE)
CLOSE CONVOLUTIONS

SAE AS81914/2
SHEET 1 OF 3

REV. A

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ISSUED 2011-01 REVISED 2012-03

TABLE 1 – FIGURE 1 DIMENSIONS

Dash Number	MAX Inside Dia. (I.D.)	MIN Inside Dia. (I.D.)	MAX Outer Dia. (O.D.)	MAX Wall Thickness	Convolutions Per Inch (CPI) ± 1	Approx. Weight Lbs (kg) Per 100 Feet (30.5m) Ref.	MIN Bend Radius
01	.188 (4.78)	.181 (4.60)	.320 (8.13)	.023 (0.58)	10	2.2 (1.00)	.313 (7.95)
02	.281 (7.14)	.273 (6.93)	.414 (10.52)	.026 (0.66)	9	3.8 (1.72)	.438 (11.13)
03	.312 (7.92)	.306 (7.77)	.450 (11.43)	.027 (0.69)	9	4.8 (2.18)	.438 (11.13)
04	.375 (9.53)	.364 (9.25)	.530 (13.46)	.029 (0.74)	9	5.6 (2.54)	.500 (12.70)
05	.437 (11.10)	.427 (10.84)	.590 (14.99)	.029 (0.74)	9	6.5 (2.95)	.500 (12.70)
06	.500 (12.70)	.485 (12.32)	.660 (16.76)	.029 (0.74)	9	6.9 (3.13)	.750 (19.05)
07	.625 (15.88)	.608 (15.44)	.780 (19.81)	.035 (0.89)	9	9.2 (4.17)	.750 (19.05)
08	.750 (19.05)	.730 (18.54)	.975 (24.77)	.035 (0.89)	8	13.8 (6.26)	.938 (23.82)
09	.875 (22.23)	.860 (21.84)	1.100 (27.94)	.035 (0.89)	8	15.0 (6.80)	.938 (23.82)
10	1.000 (25.40)	.975 (24.77)	1.260 (32.00)	.035 (0.89)	7	16.8 (7.62)	1.125 (28.58)
11	1.125 (28.58)	1.105 (28.07)	1.390 (35.31)	.035 (0.89)	6	17.5 (7.94)	1.125 (28.58)
12	1.250 (31.75)	1.210 (30.73)	1.539 (39.09)	.035 (0.89)	6	19.6 (8.89)	1.250 (31.75)
13	1.500 (38.10)	1.450 (36.83)	1.810 (46.97)	.038 (0.97)	6	26.0 (11.79)	2.000 (50.80)

NOTES:

1. DIMENSIONS ARE IN INCHES.
2. UNLESS OTHERWISE SPECIFIED TOLERANCES SHALL BE: .XX = ±0.010 (0.25 MM), .XXX = ±0.005 (0.13 MM).
3. METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED ON 25.4 MM = 1 INCH.
4. METRIC DIMENSIONS IN PARENTHESES ARE SHOWN IN MILLIMETERS.

REQUIREMENTS:

1. DIMENSIONS AND CONFIGURATION; SEE FIGURE 1 AND TABLE 1.
2. CONVOLUTION TYPE: HELICAL.
3. LENGTHS SHALL BE SPECIFIED IN FEET BY THE PROCURING ACTIVITY AND DOES NOT FORM A PART OF THE IDENTIFYING PART NUMBER. MINIMUM ORDER LENGTH SHALL BE 3 FEET (0.914 M) AND THE TUBING ORDER LENGTH TOLERANCES SHALL BE AS SPECIFIED IN TABLE 2. TUBING SHALL BE PROCURED AS COILS.

TABLE 2 - ORDER LENGTH TOLERANCE

Order Length Range	
Length in feet (meters)	Tolerance in inches (mm)
3 – 12 (0.914 m – 3.66 m)	+ 2.0 / - 0.0 (+ 50.8 mm / - 0.0 mm)
13 – 50 (3.96 m – 15.24 m)	+ 4.0 / - 0.0 (+ 101.6 mm / - 0.0 mm)
51 and up (15.55 m and up)	+ 6.0 / - 0.0 (+ 152.4 mm / - 0.0 mm)

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