

**REV.
B**

AS81914™/9

RATIONALE

REVISION IS REQUIRED TO MODIFY THE REQUIREMENTS AND PART NUMBER TO ALLOW FOR THE OPTION OF AN ADDITIONAL MATERIAL COLOR

NOTICE

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

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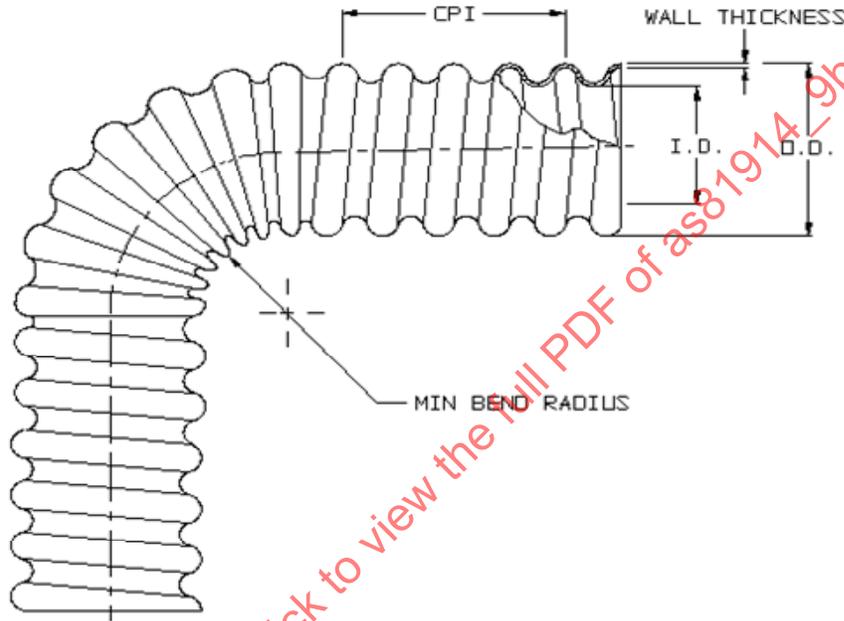
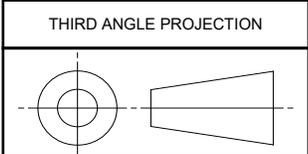


FIGURE 1 - DIMENSIONS AND CONFIGURATION

For more information on this standard, visit
<https://www.sae.org/standards/content/AS81914/9B/>



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS81914



AEROSPACE STANDARD

TUBING, PLASTIC, FLEXIBLE, CONVOLUTED,
HELICAL PERFLUOROALKOXY (PFA),
STANDARD CONVOLUTION

AS81914™/9
SHEET 1 OF 3

**REV.
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ISSUED 2011-01 REVISED 2016-05 REAFFIRMED 2021-01

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	CONVOLUCTIONS PER INCH (CPI) ± 1	APPROX. WEIGHT LBS (KG) PER 100 FEET (30.5 M) REF.	MIN BEND RADIUS
01	.188 (4.78)	.181 (4.60)	.320 (8.13)	.018 (0.46)	8	1.5 (0.67)	.500 (12.70)
02	.281 (7.14)	.273 (6.93)	.414 (10.52)	.018 (0.46)	8	1.7 (0.77)	.750 (19.05)
03	.312 (7.92)	.306 (7.77)	.450 (11.43)	.018 (0.46)	8	1.9 (0.86)	.750 (19.05)
04	.375 (9.53)	.364 (9.25)	.510 (12.95)	.018 (0.46)	8	2.2 (1.00)	.875 (22.23)
05	.437 (11.10)	.427 (10.85)	.571 (14.50)	.018 (0.46)	8	3.1 (1.41)	.875 (22.23)
06	.500 (12.70)	.485 (12.32)	.650 (16.51)	.023 (0.58)	7	4.0 (1.81)	1.250 (31.75)
07	.625 (15.88)	.608 (15.44)	.770 (19.56)	.023 (0.58)	7	4.8 (2.18)	1.500 (38.10)
08	.750 (19.05)	.730 (18.54)	.930 (23.62)	.023 (0.58)	6	6.1 (2.77)	1.750 (44.45)
09	.875 (22.23)	.860 (21.84)	1.073 (27.25)	.023 (0.58)	5	7.0 (3.18)	2.000 (50.80)
10	1.000 (25.40)	.975 (24.77)	1.226 (31.14)	.023 (0.58)	5	8.5 (3.86)	2.375 (60.33)
11	1.125 (28.58)	1.105 (28.07)	1.390 (35.31)	.023 (0.58)	5	9.3 (4.22)	2.375 (60.33)
12	1.250 (31.75)	1.210 (30.73)	1.539 (39.09)	.023 (0.58)	4	10.9 (4.94)	2.750 (69.85)
13	1.500 (38.10)	1.437 (36.50)	1.832 (46.53)	.023 (0.58)	4	12.6 (5.72)	3.375 (85.73)
14	1.750 (44.45)	1.688 (42.88)	2.082 (52.88)	.023 (0.58)	4	14.8 (6.71)	3.875 (98.43)
15	2.000 (50.80)	1.937 (49.20)	2.332 (59.23)	.023 (0.58)	4	16.8 (7.62)	4.250 (107.95)

NOTES:

1. DIMENSIONS ARE IN INCHES.
2. UNLESS OTHERWISE SPECIFIED TOLERANCES SHALL BE: .XX = ± .010 (0.25 MM), .XXX = ± .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, STANDARD CONVOLUTION (CLASS 1).
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)

	AEROSPACE STANDARD	AS81914™/9 SHEET 2 OF 3	REV. B
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