

DRAWN OVER MANDREL

MAR/KEY 512

ASTM A-512 MECHANICAL TUBING

Diameter and Wall Thickness Tolerances for Round Tubing

Outside Diameter Range, in. (mm)	Outside Diameter in. (mm)		Inside Diameter in. (mm)		Wall Thickness % in. (mm)		
	Over	Under	Over	Under	Over	Under	
	Sunk						
Up to 1/2 (12.7), excl.	0.004 (0.10)	0	–	–	15 ^a	15	
1/2 to 1-1/2 (12.7 to 38.1), excl.	0.005 (0.13)	0	–	–	10 ^a	10	
1-1/2 to 3 (38.1 to 76.2), incl.	0.010 (0.25)	0	–	–	10 ^a	10	
	Mandrel Drawn						
Less than 0.156 (3.96) wall:							
Up to 1/2 (12.7), excl.	0.004 (0.10)	0	0	0.010 (0.25)	12-1/2	12-1/2	
1/2 to 1-1/2 (12.7 to 38.1), excl.	0.005 (0.13)	0	0	0.005 (0.13) ^b	10	10	
0.156 (3.96) wall and over:							
1/2 to 1-1/2 (12.7 to 38.1), excl.	0.005 (0.13)	0	0	0.005 (0.13) ^b	7	7	
Under 0.156 (3.96) wall:							
1-1/2 (38.1) and over	0.010 (0.25)	0	–	0.010 (0.25)	10	10	
0.156 (3.96) wall and over:							
1-1/2 (38.1) and over	0.010 (0.25)	0	0	0.010 (0.25)	7	7	

^a Except at the weld line, where the weld pad may exceed this figure.

^b Tubes with an I.D. under 1/2 in. (12.7 mm) may require more than 0.005 in. (0.13 mm) I.D. tolerance and the producer should be consulted.