

American Standard Dimensional Tolerance Table

standard	Size	Outer diameter OD (mm)		Wall Thickness WT (mm)		Length (mm)		
		Size	allowable tolerance	Size	allowable tolerance	Size	allowable tolerance	
ASTM A312		[10.29.48.26]	+0.40/-0.80					
		(48.26.114.30)	+0.80/-0.80					
		(114.30.219.08)	+ 1.6/-0.80		±12.5%		+6/-0	
		(219.08.457.20)	+2.40/-0.80					
ASTM A213			+0.10/-0.10					
		[25.4.38.1]	+0.15/-0.15	D ≤ 38.1	+20%/-0	D > 50.8	+3/-0	
		(38.1.50.8)	+0.20/-0.20					
		[50.8.63.51]	+0.25/-0.25					
		[63.5.76.21]	+0.30/-0.30	D > 38.1	+22%/-0	D ≥ 50.8	+5/-0	
		[176.2.101.6]	+0.38/-0.38					
		[101.6.190.5]	+0.38/-0.64					
ASTM A269		D < 12.7			±15%		+3.2/-0	
		[112.7.38.11]	+0.13/-0.13					
		[38.1.88.91]	+0.25/-0.25		±10%		+4.8/-0	
		[88.9.139.7]	+0.38/-0.38					
		[139.7.203.2]	+0.76/-0.76					
JIS G3459		D < 30	+0.30/-0.30	S < 2	±20%			
		D > 30	±1%	S > 2	±10%			
JIS G3463		D < 40				D ≤ 50; L ≤ 7	+7/-0	
		[40.50]	+0.25/-0.25	D < 40; S < 2	+0.40/-0			
		[50.60]						
		[60.80]	+0.30/-0.30					
		[80.100]	+0.40/-0.40	D < 40; S ≥ 2	+20%/-0			
		[100.120]	+0.40/-0.60			D > 50 ; L ≤ 7	+ 10/-0	
		[120.160]	+0.40/-0.80					
GB/T 14975-02		[10.301]	+0.30/-0.30	S ≤ 3	±14%/			
		[30.501]	+0.40/-0.40	S > 3	+ 12%/-10%	[1.0.3.0]	+ 15/-0	
		[D > 50]	±0.9%					
	GB/T 14976-02		[16.10]	+0.20/-0.20	[0.5.1.0]	±0.15		
			[10.30]	+0.30/-0.30	(1.0,3)	±14%		
		[30.50]	+0.40/-0.40	S > 3	12%/-10%			
		[D > 50]	±0.9%					
GB 13296-91		[8.30]	+0.20/-0.20	[1.0.3.0]	+ 12%/-10%			
		[30.50]	+0.30/-0.30	S > 3	±10%		+ 15/-0	
		D > 50	±0.8%					
DIN 17456 DIN 17458		D2	± 1.0% ± 0.5min	T3	±10% 0.2min	D ≤ 40; L 1m	+ 1/-0	
		D3	±0.75%±0.3min			D ≤ 40 ; L [1-2]m	+2/-0	
						D ≤ 40 ; L [2-2]m	+3/-0	
					D ≤ 40 ; L [3-4]1m	+4/-0		
					D ≤ 40 ; L [4-8]1m	+5/-0		
		D4	±0.5%±0.1min	T4	±7.5% 0.15min	40 < D < 168		
ASTMA511 TABLE 3		D < 12.7			±15%		+3.2/-0	
		[12.7.38.1]	+0.13/-0.13					
		[38.1.88.9]	+0.25/-0.25					
		[88.9.139.7]	+0.38/-0.38					
		[139.7.203.2]	+0.76/-0.76		±10%		+4.8/-0	
		[203.2.219.8]	+ 1.14/-1.14					
ASTM A511 TABLE 4				S ≤ 2.77	± 16.5%			
				2.77 < S ≤ 4.37	±15%			
				4.37 < S ≤ 5.16	±14%			
				S > 5.16	± 12.5%			
				S ≤ 2.77	±16.5%			
		[76.2,139.7]	+0.79/-0.79	2.77 < S ≤ 4.37	±15%		± 4.76/-0	
				4.37 < S ≤ 5.16	±14%			
				S > 5.16	12.5%			
				4.37 < S ≤ 5.16	±14%			
	[139.7.203.2]	+0.79/-0.79	S > 5.16	±12.5%				