

# Tolerances

Nominal Diameter		Tolerances of mean diameter					
above	up to and inc	applicable to the mean diameter	Applicable to any diameter including deviations from the circular shape for straight lengths <sup>a,b</sup>	3 <sup>c</sup>	10	± 0,06	± 0,12
				10	20	± 0,08	± 0,16
20	30	± 0,12	± 0,24				
30	50	± 0,15	± 0,30				
50	100	± 0,20	± 0,50				
100	200	± 0,50	± 1,00				
200	300	± 0,75	± 1,50				
300	450	± 1,00	± 2,00				
<sup>a</sup> The tolerances indicated in this column are not applicable to <ul style="list-style-type: none"> <li>• tubes in rolls or coils</li> <li>• tubes with OD/T&gt;50</li> <li>• tubes in an annealed state</li> </ul>							
<sup>b</sup> When the diameter is measured at a distance from the ends of the tube of up to 100mm or the equivalent of to a nominal diameter (choosing the lesser of both values), unless otherwise agreed, the tolerance is allowed to be increased by multiplying it by 3.							
<sup>c</sup> Includes 3.							

Nominal exterior diameter		Tolerances of nominal wall thickness t (%)											
mm		t from 0.3 mm up to and inc. 1 mm	t above 1 mm, up to and inc. 3 mm	t above 3 mm, up to and inc. 6 mm	t above 6 mm, up to and inc. 10 mm	t above 10mm	3 <sup>a</sup>	40	± 15	± 13	± 11	± 10	-
above	up to and inc												
40	120	± 15	± 13	± 12	± 11	± 10							
120	250	-	± 13	± 13	± 12	± 11							
250	450	-	-	± 15	± 15	± 15							
<sup>a</sup> Includes 3.													

**Tolerances of diameter including deviations from circular shape, tubes in rolls or coils**

Nominal exterior diameter		Tolerances of nominal diameter including deviations from the circular shape	Applicable to inner diameter of winding
above	up to and inc		min.
3 <sup>a</sup>	6	± 0,30	400
6	10	± 0,50	600
10	20	± 0,70	800
20	30	± 0,90	1000
<sup>a</sup> Includes 3.			