







Precision is our standard






Internal Diameter	Outside Diameter	Max. Length
 mm	 mm	 mm
0.15 ± 0.01	4.0 ± 0.5	250
	5.0 ± 0.5	
	6.0 ± 1.0	
0.20 ± 0.01	4.0 ± 0.5	250
	5.0 ± 0.5	
	6.0 ± 1.0	
0.25 ± 0.01	4.0 ± 0.5	500
	5.0 ± 0.5	
	6.0 ± 1.0	
	7.0 ± 1.0	
0.30 ± 0.01	4.0 ± 0.5	500
	5.0 ± 0.5	
	6.0 ± 1.0	
	7.0 ± 1.0	
0.35 ± 0.01	4.0 ± 0.5	500
	5.0 ± 0.5	
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
0.40 ± 0.01	4.0 ± 0.5	1,000
	5.0 ± 0.5	
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
0.45 ± 0.01	4.0 ± 0.5	1,000
	5.0 ± 0.5	
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
0.50 ± 0.01	4.0 ± 0.5	1,000
	5.0 ± 0.5	
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	

Internal Diameter	Outside Diameter	Max. Length
 mm	 mm	 mm
0.55 ± 0.01	5.0 ± 0.5	1,000
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
0.60 ± 0.01	5.0 ± 0.5	1,000
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
0.70 ± 0.01	5.0 ± 0.5	1,000
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
0.75 ± 0.01	5.0 ± 0.5	1,000
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
0.80 ± 0.01	5.0 ± 0.5	1,000
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
0.85 ± 0.01	5.0 ± 0.5	1,000
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
0.90 ± 0.01	5.0 ± 0.5	1,000
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
0.95 ± 0.01	5.0 ± 0.5	1,000
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	






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Internal Diameter	Outside Diameter	Max. Length
 mm	 mm	 mm
1.00 ± 0.01	5.0 ± 0.5	1,000
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
1.10 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
1.20 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
1.30 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
1.40 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
1.50 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
1.60 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
1.70 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
1.80 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
1.90 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	






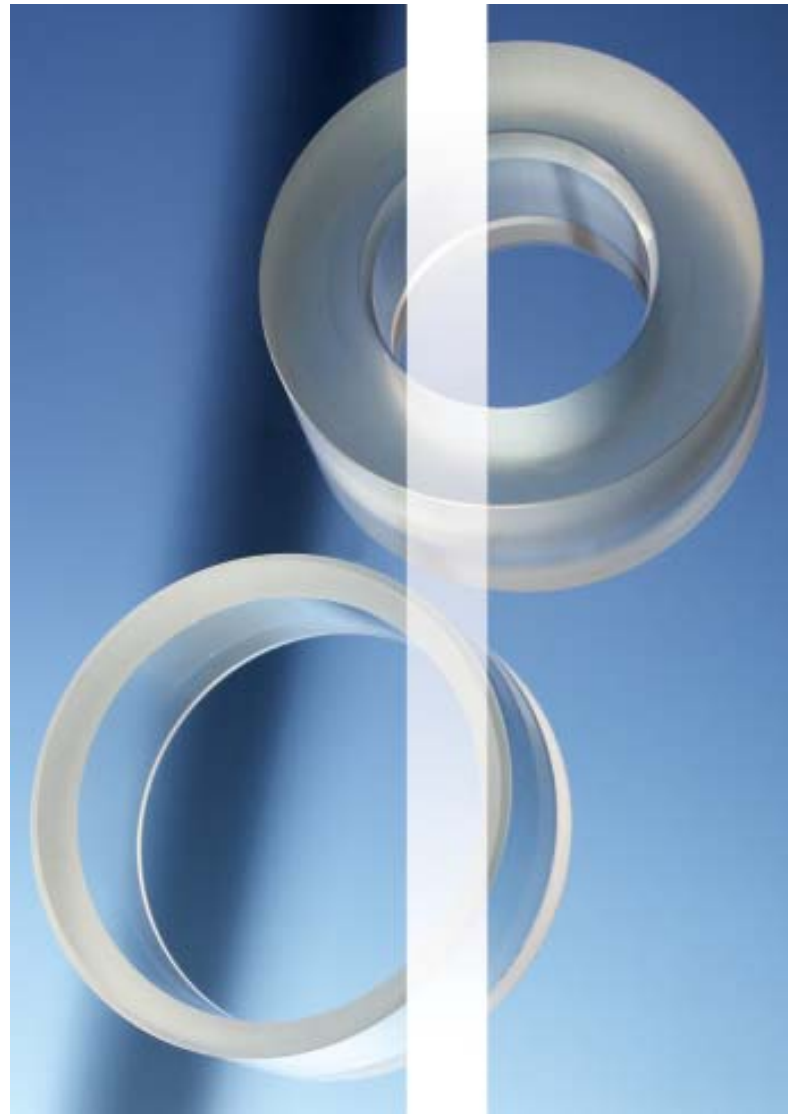
Internal Diameter	Outside Diameter	Max. Length
 mm	 mm	 mm
2.00 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
2.10 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
2.20 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
2.30 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
2.40 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
2.50 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	
2.60 ± 0.01	5.0 ± 0.5	1,000
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
2.70 ± 0.01	5.0 ± 0.5	1,000
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
2.80 ± 0.01	5.0 ± 0.5	1,000
	6.0 ± 1.0	
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
2.90 ± 0.01	6.0 ± 1.0	1,000
	7.0 ± 1.0	
	8.0 ± 1.0	
	9.0 ± 1.0	
	9.0 ± 1.0	






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Internal Diameter	Wall Thickness	Max. Length
 mm	 mm	 mm
3.00 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	1.9 ± 0.3	
	3.1 ± 0.3	
3.10 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	1.9 ± 0.3	
	3.1 ± 0.3	
3.20 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	1.9 ± 0.3	
	3.1 ± 0.3	
3.30 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	1.9 ± 0.3	
	3.1 ± 0.3	
3.40 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	1.9 ± 0.3	
	3.1 ± 0.3	
3.50 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	1.9 ± 0.3	
	3.1 ± 0.3	
3.60 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	1.9 ± 0.3	
	3.1 ± 0.3	
3.70 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	1.9 ± 0.3	
	3.1 ± 0.3	
3.80 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	1.9 ± 0.3	
	3.1 ± 0.3	
3.90 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	1.9 ± 0.3	
	3.1 ± 0.3	









Internal Diameter	Wall Thickness	Max. Length
 mm	 mm	 mm
4.00 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
	3.1 ± 0.3	
4.10 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
	3.6 ± 0.3	
4.20 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
	3.6 ± 0.3	
4.30 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
	3.6 ± 0.3	
4.40 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
	3.6 ± 0.3	
4.50 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
	3.6 ± 0.3	
4.60 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
	3.6 ± 0.3	
4.70 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
	3.6 ± 0.3	
4.80 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
	3.6 ± 0.3	
4.90 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
	3.6 ± 0.3	

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Internal Diameter	Wall Thickness	Max. Length
 mm	 mm	 mm
5.00 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
	3.6 ± 0.3	
5.20 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
5.40 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
5.60 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
5.80 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
6.00 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
6.20 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
6.40 ± 0.01	1.1 ± 0.1	1,000
	2.3 ± 0.3	
	2.9 ± 0.3	
6.60 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
6.80 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
7.00 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
7.20 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
7.40 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	

Internal Diameter	Wall Thickness	Max. Length
 mm	 mm	 mm
7.60 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
7.80 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
8.00 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
8.20 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.3 ± 0.3	
8.40 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	1.9 ± 0.2	
	2.3 ± 0.3	
8.60 ± 0.01	2.6 ± 0.3	1,000
	1.1 ± 0.1	
	1.6 ± 0.2	
	1.9 ± 0.2	
8.80 ± 0.01	2.3 ± 0.3	1,000
	2.6 ± 0.3	
	1.1 ± 0.1	
	1.6 ± 0.2	
9.00 ± 0.01	2.3 ± 0.3	1,000
	2.6 ± 0.3	
	1.1 ± 0.1	
	1.6 ± 0.2	
9.20 ± 0.01	3.4 ± 0.3	1,000
	1.1 ± 0.1	
	1.6 ± 0.2	
	1.9 ± 0.2	






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Internal Diameter	Wall Thickness	Max. Length
 mm	 mm	 mm
9.40 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	2.4 ± 0.3	
	2.6 ± 0.3	
	3.4 ± 0.3	
9.60 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	1.9 ± 0.2	
	2.4 ± 0.3	
	2.6 ± 0.3	
9.80 ± 0.01	1.1 ± 0.1	1,000
	1.6 ± 0.2	
	1.9 ± 0.2	
	2.4 ± 0.3	
	2.6 ± 0.3	
10.00 ± 0.01	4.6 ± 0.5	1,000
	1.1 ± 0.1	
	1.6 ± 0.2	
	1.9 ± 0.2	
	2.2 ± 0.3	
	2.4 ± 0.3	
10.50 ± 0.01	2.6 ± 0.3	1,000
	3.4 ± 0.3	
	1.1 ± 0.1	
	1.9 ± 0.2	
	2.2 ± 0.3	
11.00 ± 0.01	2.4 ± 0.3	1,000
	2.6 ± 0.3	
	1.1 ± 0.1	
	1.3 ± 0.2	
	1.9 ± 0.2	
	2.2 ± 0.3	
11.50 ± 0.01	2.4 ± 0.3	1,000
	1.1 ± 0.1	
	1.3 ± 0.2	
	1.9 ± 0.2	
	2.2 ± 0.3	






Internal Diameter	Wall Thickness	Max. Length
 mm	 mm	 mm
12.00 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.2 ± 0.3	
	2.4 ± 0.3	
	2.6 ± 0.3	
12.50 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.4 ± 0.3	
	2.6 ± 0.3	
	2.6 ± 0.3	
13.00 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.4 ± 0.3	
	2.6 ± 0.3	
13.50 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.4 ± 0.3	
	2.6 ± 0.3	
	2.6 ± 0.3	
14.00 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.4 ± 0.3	
	2.6 ± 0.3	
14.50 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.6 ± 0.3	
	2.6 ± 0.3	
15.00 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.6 ± 0.3	
	2.6 ± 0.3	
15.50 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.6 ± 0.3	
	2.6 ± 0.3	
16.00 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.3	
	2.6 ± 0.3	
	2.6 ± 0.3	
16.50 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.6 ± 0.3	
	2.6 ± 0.3	
17.00 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.6 ± 0.3	
	2.6 ± 0.3	

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Internal Diameter	Wall Thickness	Max. Length
 mm	 mm	 mm
17.50 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.6 ± 0.3	
18.00 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.6 ± 0.3	
18.50 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.9 ± 0.3	
19.00 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.9 ± 0.3	
19.50 ± 0.01	1.3 ± 0.2	1,000
	1.9 ± 0.2	
	2.9 ± 0.3	
20.00 ± 0.01	1.3 ± 0.2	1,000
	2.1 ± 0.2	
	2.9 ± 0.3	
21.00 ± 0.01	1.3 ± 0.2	1,000
	1.5 ± 0.2	
	2.9 ± 0.3	
22.00 ± 0.01	1.5 ± 0.2	1,000
	2.1 ± 0.2	
	2.9 ± 0.3	
23.00 ± 0.01	1.5 ± 0.2	1,000
	2.1 ± 0.2	
	2.9 ± 0.3	
24.00 ± 0.01	1.5 ± 0.2	1,000
	2.1 ± 0.2	
	2.9 ± 0.3	
25.00 ± 0.01	1.5 ± 0.3	1,000
	2.1 ± 0.2	
	2.9 ± 0.3	
26.00 ± 0.01	1.5 ± 0.3	1,000
	2.1 ± 0.3	
	2.9 ± 0.3	
	5.1 ± 0.5	






Internal Diameter	Wall Thickness	Max. Length
 mm	 mm	 mm
27.00 ± 0.01	1.5 ± 0.3	1,000
	2.1 ± 0.3	
	2.9 ± 0.3	
28.00 ± 0.01	5.1 ± 0.5	1,000
	1.5 ± 0.3	
	2.1 ± 0.3	
29.00 ± 0.01	2.9 ± 0.3	1,000
	5.1 ± 0.5	
	7.1 ± 0.7	
30.00 ± 0.01	9.1 ± 0.8	1,000
	1.5 ± 0.3	
	2.1 ± 0.3	
35.00 ± 0.01	2.9 ± 0.3	1,000
	5.1 ± 0.5	
	7.1 ± 0.7	
40.00 ± 0.01	9.1 ± 0.8	1,000
	1.7 ± 0.3	
	2.4 ± 0.3	
45.00 ± 0.02	3.3 ± 0.4	1,000
	5.1 ± 0.5	
	7.1 ± 0.7	
	9.1 ± 0.8	
	1.9 ± 0.3	
	2.6 ± 0.3	
	3.6 ± 0.4	
	5.1 ± 0.5	
	7.1 ± 0.7	
	9.1 ± 0.8	

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Internal Diameter	Wall Thickness	Max. Length
 mm	 mm	 mm
50.00 ± 0.02	1.9 ± 0.3	1,000
	2.6 ± 0.3	
	3.3 ± 0.4	
	4.3 ± 0.5	
	5.1 ± 0.5	
	7.1 ± 0.7	
55.00 ± 0.03	9.1 ± 0.9	1,000
	2.3 ± 0.3	
	3.3 ± 0.4	
	4.3 ± 0.5	
	5.1 ± 0.5	
	9.1 ± 0.9	
60.00 ± 0.03	2.3 ± 0.3	1,000
	3.3 ± 0.4	
	4.3 ± 0.5	
	5.1 ± 0.5	
	9.1 ± 0.9	
	9.1 ± 0.9	
65.00 ± 0.03	2.3 ± 0.3	1,000
	3.3 ± 0.4	
	5.1 ± 0.6	
	7.1 ± 0.8	
	9.1 ± 0.9	
	9.1 ± 0.9	
70.00 ± 0.03	2.6 ± 0.3	1,000
	3.6 ± 0.4	
	5.1 ± 0.6	
	7.1 ± 0.8	
	9.1 ± 0.9	
	9.1 ± 0.9	
75.00 ± 0.03	2.6 ± 0.3	1,000
	3.6 ± 0.4	
	5.1 ± 0.6	
	7.1 ± 0.8	
	9.1 ± 0.9	
	9.1 ± 0.9	
80.00 ± 0.03	2.6 ± 0.3	1,000
	3.6 ± 0.4	
	5.1 ± 0.6	
	7.1 ± 0.8	
	9.1 ± 0.9	
	9.1 ± 1.0	



Internal Diameter	Wall Thickness	Max. Length
 mm	 mm	 mm
85.00 ± 0.03	2.6 ± 0.3	1,000
	3.1 ± 0.3	
	3.6 ± 0.4	
	5.1 ± 0.6	
	7.1 ± 0.9	
	9.1 ± 1.0	
90.00 ± 0.03	2.6 ± 0.3	1,000
	3.1 ± 0.3	
	3.6 ± 0.4	
	5.1 ± 0.8	
	7.1 ± 0.9	
	9.1 ± 1.0	
95.00 ± 0.03	3.1 ± 0.5	1,000
	5.1 ± 0.8	
	7.1 ± 0.9	
	9.1 ± 1.0	
	9.1 ± 1.0	
	9.1 ± 1.0	
100.00 ± 0.04	3.1 ± 0.6	1,000
	5.1 ± 0.8	
	7.1 ± 0.9	
	9.1 ± 1.0	
	9.1 ± 1.0	
	9.1 ± 1.0	
110.00 ± 0.04	3.1 ± 0.7	1,000
	5.1 ± 0.8	
	7.1 ± 1.0	
	9.1 ± 1.1	
	9.1 ± 1.1	
	9.1 ± 1.1	
120.00 ± 0.04	3.1 ± 0.7	1,000
	5.1 ± 0.8	
	7.1 ± 1.0	
	9.1 ± 1.1	
	9.1 ± 1.1	
	9.1 ± 1.1	
140.00 ± 0.04	5.1 ± 0.8	1,000
	7.1 ± 1.1	
	9.1 ± 1.2	
	9.1 ± 1.2	
	9.1 ± 1.2	
	9.1 ± 1.2	
150.00 ± 0.05	5.1 ± 0.9	1,000
	7.1 ± 1.1	
	9.1 ± 1.2	
	9.1 ± 1.2	
	9.1 ± 1.2	
	9.1 ± 1.2	
160.00 ± 0.05	5.1 ± 0.9	1,000
	7.1 ± 1.1	
	9.1 ± 1.2	
	9.1 ± 1.2	
	9.1 ± 1.2	
	9.1 ± 1.2	
200.00 ± 0.07	7.1 ± 1.2	1,000
	9.1 ± 1.4	
	9.1 ± 1.4	
	9.1 ± 1.4	
	9.1 ± 1.4	
	9.1 ± 1.4	
210.00 ± 0.07	7.1 ± 1.4	1,000
	9.1 ± 1.4	
	9.1 ± 1.4	
	9.1 ± 1.4	
	9.1 ± 1.4	
	9.1 ± 1.4	
225.00 ± 0.08	7.1 ± 2.0	1,000
	9.1 ± 2.0	
	9.1 ± 2.0	
	9.1 ± 2.0	
	9.1 ± 2.0	
	9.1 ± 2.0	
240.00 ± 0.60	9.1 ± 1.5	1,000
	9.1 ± 1.5	
	9.1 ± 1.5	
	9.1 ± 1.5	
	9.1 ± 1.5	
	9.1 ± 1.5	



*Please inquire for other dimensions