

## TUBES – standard product range

Outer-Ø in mm	Wall thickness in mm
30	1,5 - 2,0
40	1,5 - 3,0
45	1,5 - 3,0
50	2,0 - 3,0
60	2,0 - 3,0
65	2,0 - 3,0
70	2,0 - 3,0
80	2,0 - 3,0
84	2,0 - 3,0
90	2,0 - 3,0
100*	2,0 - 3,0
110	2,0 - 3,0
120	2,0 - 3,0
133	2,0 - 3,0
140	2,5 - 4,0
150	2,5 - 4,0
160	2,5 - 4,0
170	2,5 - 4,0
180*	2,5 - 4,0
190	2,5 - 4,0
195	2,5 - 4,0
200*	3,0 - 4,0
220	3,0 - 4,0
230	3,0 - 4,0
250	3,0 - 5,0
273*	3,0 - 5,0
300	3,0 - 5,0
315	3,0 - 5,0
324	3,0 - 5,0
350	4,0 - 5,0
400	4,0 - 5,0
450	4,0 - 5,0
500	4,0 - 5,0
<b>Square-tubes</b>	
45 x 45	1,5 - 2,5
90 x 90	3,0
100 x 100	3,0
120 x 120	3,0
170 x 170	3,5

\* as well with inside prismatic

We also supply semi-finished tube products, precisely fabricated to your specifications. All our products are made in Germany.

As a manufacturer we generally do not keep all the illustrated varieties of tubes in stock. The table therefore only demonstrates the manufacturing capabilities. Other diameters and lengths as well as impact resistant or coloured applications upon request.

**Materials:**  PMMA and PC

PMMA

**Colours:**  transparent (clear), opal (white), diffuse (satined), coloured

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### Tolerances for PC and PMMA tubes

The following manufacturing tolerances apply at a reference temperature of 20° C.

### Tolerances for roundness (in % of outer diameter)

Ø 30 mm to Ø 249 mm = ± 1,0%

Ø 250 mm to Ø 500 mm = ± 1,5 %

(measured 50 mm from the edge)

### Tolerances for wall thickness (in %)

Ø 30 mm to Ø 249 mm = ± 10,0 %

Ø 250 mm to Ø 500 mm = ± 12,5 %

### Tolerances for length (in mm)

±10,0 mm (automatic cuts within the extrusion line)

Separate cutting service (manual cuts) for lengths (L):

L ≤ 1.000 mm                      ± 1,0 mm

1.000 < L ≤ 2.000 mm           ± 1,5 mm

L > 2.000 mm                      upon demand

### Tolerances for straightness:

maximum deviation: 3.0 mm on 1.000 mm chord length

### Square-tubes:

Specific tolerances upon request