

Tubes acc. to DIN 11850 - Series 1

Nominal Size DN	OD	Tolerances	Wall Thickness	Tolerances	Tolerances	Weight	Ordering Code
		OD		On Wall Thickness	On Length	On Length	
10	12	±0.12	1.0	±10%	+3.00	0.27	010000-010-D*
15	18	±0.12	1.0	±10%	+3.00	0.42	015000-015-D*
20	22	±0.12	1.0	±10%	+3.00	0.51	020000-020-D*
25	28	±0.15	1.0	±10%	+3.00	0.66	025000-025-D*
32	34	±0.15	1.0	±10%	+3.00	0.82	032000-032-D*
40	40	±0.2	1.0	±10%	+3.00	0.97	040000-040-D*
50	52	±0.2	1.0	±10%	+3.00	1.27	050000-050-D*

* The first digit refers to material guide, according to Table 1

** The last digit refers to surface quality, according to Table 2

Tubes acc. to DIN 11850 - Series 2

Nominal Size DN	OD	Tolerances	Wall Thickness	Tolerances	Tolerances	Weight	Ordering Code
		OD		On Wall Thickness	On Length	On Length	
10	13	±0.3	1.5	±10%	+3.00	0.43	010000-010-D*
15	19	±0.3	1.5	±10%	+3.00	0.66	015000-015-D*
20	23	±0.3	1.5	±10%	+3.00	0.81	020000-020-D*
25	29	±0.25	1.5	±10%	+3.00	1.03	025000-025-D*
32	35	±0.3	1.5	±10%	+3.00	1.26	032000-032-D*
40	41	±0.3	1.5	±10%	+3.00	1.50	040000-040-D*
50	53	±0.3	1.5	±10%	+3.00	1.944	050000-050-D*
65	70	±0.3	2.0	±10%	+3.00	3.43	065000-065-D*
80	85	±0.3	2.0	±10%	+3.00	4.16	080000-080-D*
100	104	±0.3	2.0	±10%	+3.00	5.03	100000-100-D*
125	129	±0.4	2.0	±10%	+10.00	6.36	125000-125-D*
150	154	±0.4	2.0	±10%	+10.00	7.612	150000-150-D*
200	204	±0.4	2.0	±10%	+10.00	10.116	200000-200-D*
250	254	±0.4	2.0	±10%	+20.00	12.555	250000-250-D*
300	304	±0.4	2.0	±10%	+20.00	15.045	300000-300-D*

* The first digit refers to material guide, according to Table 1

** The last digit refers to surface quality, according to Table 2

Table 1

Material Guide	
1.4301 (304)	1
1.4307 (304L)	2
1.4401 (316)	3
1.4404 (316L)	4

Table 2

Inside Surface	Outside Surface	Ordering Code
No finish requirement	No finish requirement	u
MP* 30µ-in 0.80µm	No finish requirement	0
MP* 30µ-in 0.80µm	MP* 30µ-in 0.80µm	3
MP* 20µ-in 0.51µm	MP* 30µ-in 0.80µm	4
MP* 12µ-in 0.30µm	MP* 30µ-in 0.80µm	7
MP* 9µ-in 0.23µm	MP* 30µ-in 0.80µm	8
Mirror	MP* 30µ-in 0.80µm	9

*MP: Mechanically Polished

Chemical Composition

Werkstoff- nummer	Norm	C ≤	Si ≤	Mn ≤	P max.	S ≤	N ≤	Cr	Mo	Ni
1.4301	DIN EN 10217-7	0.07	1.0	2.0	0.045	0.015	0.11	17.0 bis 19.5	—	8.0 bis 10.5
304	ASTM A269 ASTM A 270	0.08	0.75	2.0	0.045	0.030	0.10	18.0 bis 20.0	—	8.0 bis 10.5
1.4307	DIN EN 10217-7	0.03	1.0	2.0	0.045	0.015	0.11	17.5 bis 19.5	—	8.0 bis 10.0
304L	ASTM A269 ASTM A 270	0.03	0.75	2.0	0.045	0.030	0.10	18.0 bis 20.0	—	8.0 bis 12.0
1.4404	DIN EN 10217-7	0.03	1.0	2.0	0.045	0.015	0.11	16.5 bis 18.5	2.0 bis 2.5	10.0 bis 13.0
316L	ASTM A269 ASTM A 270	0.03	0.75	2.0	0.045	0.030	0.10	16.0 bis 18.0	2.0 bis 3.0	10.0 bis 14.0