

AL-229

Technical Bulletin

Syringe Needle Conversion Chart

Needle Gauge	Nominal O.D.			Nominal I.D.			Nominal Wall		
	mm	inches	tol. (in.)	mm	inches	tol. (in.)	mm	inches	tol. (in.)
10	3.404	0.1340	±0.0010	2.692	1.1060	±0.0020	0.356	0.0140	±0.0010
11	3.048	0.1200	↓	2.388	0.0940	↓	0.330	0.0130	↓
12	2.769	0.1090	↓	2.159	0.0850	↓	0.305	0.0120	↓
13	2.413	0.0950	↓	1.803	0.0710	↓	0.305	0.0120	↓
14	2.108	0.0830	↓	1.600	0.0630	↓	0.254	0.0100	↓
15	1.829	0.0720	±0.0005	1.372	0.0540	±0.0015	0.229	0.0090	±0.0005
16	1.651	0.0650	↓	1.194	0.0470	↓	0.229	0.0090	↓
17	1.473	0.0580	↓	1.067	0.0420	↓	0.203	0.0080	↓
18	1.270	0.0500	↓	0.838	0.0330	↓	0.203	0.0080	↓
19	1.067	0.0420	↓	0.688	0.0270	↓	0.191	0.0075	↓
20	0.902	0.0355	+0.0005	0.584	0.0230	+0.0015	0.152	0.0060	+0.0000
21	0.813	0.0320	-0.0000	0.495	0.0195	-0.0000	0.152	0.0060	-0.0005
22	0.711	0.0280	↓	0.394	0.0155	↓	0.152	0.0060	↓
22s	0.711	0.0280	↓	0.140	0.0055	↓	0.279	0.0110	↓
23	0.635	0.0250	↓	0.318	0.0125	↓	0.152	0.0060	↓
24	0.559	0.0220	↓	0.292	0.0115	↓	0.127	0.0050	↓
25	0.508	0.0200	↓	0.241	0.0095	↓	0.127	0.0050	↓
25s	0.508	0.0200	↓	0.140	0.0055	↓	0.175	0.0070	↓
26	0.457	0.0180	↓	0.241	0.0095	↓	0.102	0.0040	↓
26s	0.467	0.0184	↓	0.114	0.0045	↓	0.175	0.0070	↓
27	0.406	0.0160	↓	0.191	0.0075	↓	0.102	0.0040	↓
28	0.356	0.0140	↓	0.165	0.0065	↓	0.089	0.0035	±0.00025
29	0.330	0.0130	↓	0.165	0.0065	↓	0.076	0.0030	↓
30	0.305	0.0120	↓	0.140	0.0055	↓	0.076	0.0030	↓
31	0.254	0.0100	↓	0.114	0.0045	↓	0.064	0.0025	↓
32	0.229	0.0090	↓	0.089	0.0035	↓	0.051	0.0020	↓
33	0.203	0.0080	↓	0.089	0.0035	↓	0.051	0.0020	↓

PTFE Syringe Needle Conversion Chart

Needle Gauge	Nominal O.D.		Nominal I.D.		Wall Thickness	
	inches	mm	inches	mm	inches	tol. (in.)
7	0.178	4.52	0.148	3.76	0.015	±0.0040
8	0.163	4.14	0.133	3.38	↓	↓
9	0.148	3.76	0.118	3.00	↓	↓
10	0.130	3.30	0.106	2.69	0.012	±0.0030
11	0.119	3.02	0.095	2.41	↓	↓
12	0.109	2.77	0.085	2.16	↓	↓
13	0.100	2.54	0.076	1.93	↓	↓
14	0.090	2.29	0.066	1.68	↓	↓
15	0.083	2.11	0.059	1.50	↓	↓
16	0.077	1.96	0.053	1.35	↓	↓
17	0.071	1.80	0.047	1.19	↓	↓
18	0.066	1.68	0.042	1.07	↓	↓
19	0.062	1.57	0.038	0.97	↓	↓
20	0.058	1.47	0.034	0.86	↓	↓
22	0.046	1.17	0.028	0.71	0.009	±0.0020
24	0.040	1.02	0.022	0.56	↓	↓
26	0.036	0.91	0.018	0.46	↓	↓
28	0.033	0.84	0.015	0.38	↓	↓
30	0.030	0.76	0.012	0.30	↓	↓