ANSI-B18.2.1, Appendix V

WRENCH OPENINGS FOR SQUARE AND HEX BOLTS AND SCREWS

Nominal Size of Wrench also Basic (Maximum) width Across Flats of Bolt and Screw Heads		Allowance Between Bolt or Screw Head and Jaws of Wrench	Wrench Openings			Square Bolts / Hex Bolt / Hex Cap Screw / Lag Screw	Heavy Hex Bolt / Heavy Hex Screw / Heavy Hex Structural Bolt
			Min	Tol	Max	Nominal Product Sizes	
1/8	0.1250	0.002	0.127	0.005	0.132		
5/32	0.1562	0.002	0.158	0.005	0.163		
3/16	0.1875	0.002	0.190	0.005	0.195		
7/32	0.2188	0.002	0.220	0.005	0.225		
1/4	0.2500	0.002	0.252	0.005	0.257		
9/32	0.2813	0.002	0.283	0.005	0.288	No. 10	
5/16	0.3125	0.003	0.316	0.006	0.322		
11/32	0.3438	0.003	0.347	0.006	0.353		
3/8	0.3750	0.003	0.378	0.006	0.384	1/4	
7/16	0.4375	0.003	0.440	0.006	0.446	1/4	
1/2	0.5000	0.004	0.504	0.006	0.510	5/16	
9/16	0.5625	0.004	0.566	0.007	0.573	3/8	
5/8	0.6250	0.004	0.629	0.007	0.636	7/16	
11/16	0.6875	0.004	0.692	0.007	0.699		
3/4	0.7500	0.005	0.755	0.008	0.763	1/2	
13/16	0.8125	0.005	0.818	0.008	0.826	9/16	
7/8	0.8750	0.005	0.880	0.008	0.888		1/2
15/16	0.9375	0.006	0.944	0.009	0.953	5/8	
1	1.0000	0.006	1.006	0.009	1.015		
1 1/16	1.0625	0.006	1.068	0.009	1.077		5/8
1 1/8	1.1250	0.007	1.132	0.010	1.142	3/4	
1 1/4	1.2500	0.007	1.257	0.010	1.267		3/4
1 5/16	1.3125	0.008	1.320	0.011	1.331	7/8	
1 3/8	1.3750	0.008	1.383	0.011	1.394		
1 7/16	1.4375	0.008	1.446	0.011	1.457		7/8
1 1/2	1.5000	0.008	1.508	0.012	1.520	1	
1 5/8	1.6250	0.009	1.634	0.012	1.646		1
1 11/16	1.6875	0.009	1.696	0.012	1.708	1 1/8	
1 13/16	1.8125	0.010	1.822	0.013	1.835		1 1/8
1 7/8	1.8750	0.010	1.885	0.013	1.898	1 1/4	

Nominal Size of Wrench also Basic (Maximum) width Across Flats of Bolt and Screw Heads		Allowance Between Bolt or Screw Head and Jaws of Wrench	Wrench Openings			Square Bolts / Hex Bolt / Hex Cap Screw / Lag Screw	Heavy Hex Bolt / Heavy Hex Screw / Heavy Hex Structural Bolt
			Min	Tol	Max	Nominal Product Sizes	
2	2.0000	0.011	2.011	0.014	2.025		1 1/4
2 1/16	2.0625	0.011	2.074	0.014	2.088	1 3/8	
2 3/16	2.1875	0.012	2.200	0.015	2.215		1 3/8
2 1/4	2.2500	0.012	2.262	0.015	2.277	1 1/2	
2 3/8	2.3750	0.013	2.388	0.016	2.404		1 1/2
2 7/16	2.4375	0.013	2.450	0.016	2.466	1 5/8	
2 9/16	2.5625	0.014	2.576	0.017	2.593		1 5/8
2 5/8	2.6250	0.014	2.639	0.017	2.656	1 3/4	
2 3/4	2.7500	0.014	2.766	0.017	2.783		1 3/4
2 13/16	2.8125	0.015	2.827	0.018	2.845	1 7/8	
2 15/16	2.9375	0.016	2.954	0.019	2.973		1 7/8
3	3.0000	0.016	3.016	0.019	3.034	2	
3 1/8	3.1250	0.017	3.142	0.020	3.162		2
3 3/8	3.3750	0.018	3.393	0.021	3.414	2 1/4	
3 1/2	3.5000	0.019	3.518	0.022	3.540		2 1/4
3 3/4	3.7500	0.020	3.770	0.023	3.793	2 1/2	
3 7/8	3.8750	0.020	3.895	0.023	3.918		2 1/2
4 1/8	4.1250	0.022	4.147	0.025	4.172	2 3/4	
4 1/4	4.2500	0.022	4.272	0.025	4.297		2 3/4
4 1/2	4.5000	0.024	4.524	0.026	4.550	3	
4 5/8	4.6250	0.024	4.649	0.027	4.676		3
4 7/8	4.8750	0.025	4.900	0.028	4.928	3 1/4	
5	5.0000	0.026	5.026	0.029	5.055		
5 1/4	5.2500	0.027	5.277	0.030	5.307	3 1/2	
5 3/8	5.3750	0.028	5.403	0.031	5.434		
5 5/8	5.6250	0.029	5.654	0.032	5.686	3 3/4	
5 3/4	5.7500	0.030	5.780	0.033	5.813		
6	6.0000	0.031	6.031	0.034	6.065	4	
6 1/8	6.1250	0.032	6.157	0.035	6.192		