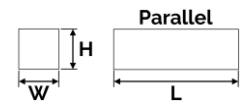


Key And Keyway Dimensions ASME B17.1-1967 (R2013)

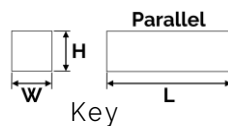
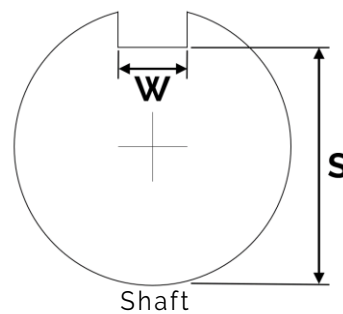
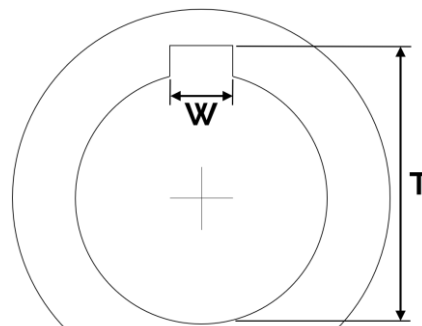


Nominal Shaft Diameter		Nominal Key Size				Set Screw Over Key
Over	To (Including)	Width, W Square And Rectangular	Square	Rectangular	Height, H	
5/16	7/16	3/32	3/32	-	#10	
7/16	9/16	1/8	1/8	3/32	#10	
9/16	7/8	3/16	3/16	1/8	1/4	
7/8	1-1/4	1/4	1/4	3/16	5/16	
1-1/4	1-3/8	5/16	5/16	1/4	3/8	
1-3/8	1-3/4	3/8	3/8	1/4	3/8	
1-3/4	2-1/4	1/2	1/2	3/8	1/2	
2-1/4	2-3/4	5/8	5/8	7/16	1/2	
2-3/4	3-1/4	3/4	3/4	1/2	5/8	
3-1/4	3-3/4	7/8	7/8	5/8	3/4	
3-3/4	4-1/2	1	1	3/4	3/4	
4-1/2	5-1/2	1-1/4	1-1/4	7/8	7/8	
5-1/2	6-1/2	1-1/2	1-1/2	1	1	
6-1/2	7-1/2	1-3/4	1-3/4	1-1/2	-	
7-1/2	9	2	2	1-1/2	-	
9	11	2-1/2	2-1/2	1-3/4	-	

Notes:

- Square keys are preferred for shaft diameters that are 6-1/2 inches and smaller.
- Rectangular keys are preferred for shaft diameters larger than 6-1/2 inches.
- Make sure to consider the stress concentrations around the keyway.
- Key length should be kept to less than 1.5 times the shaft diameter to avoid excessive twisting with the angular deflection of the shaft.
- If more key length is needed then multiple keys may be used to carry greater load. They are normally placed 90 degrees apart. (Shigley's 9th ed)

Nominal Shaft Diameter	Shaft			Hub	
	Width W	Square S	Rectangular S	Square T	Rectangular T
1/2	0.127	0.430	0.445	0.570	0.554
	0.125	0.415	0.430	0.560	0.544
9/16	0.127	0.493	0.509	0.633	0.617
	0.125	0.478	0.494	0.623	0.607
5/8	0.190	0.517	0.548	0.719	0.688
	0.188	0.502	0.533	0.709	0.678
11/16	0.190	0.581	0.612	0.783	0.752
	0.188	0.566	0.597	0.773	0.742
3/4	0.190	0.644	0.676	0.847	0.816
	0.188	0.629	0.661	0.837	0.806
13/16	0.190	0.708	0.739	0.910	0.879
	0.188	0.693	0.724	0.900	0.869
7/8	0.190	0.771	0.802	0.974	0.942
	0.188	0.756	0.787	0.964	0.932
15/16	0.252	0.796	0.827	1.061	1.029
	0.250	0.781	0.812	1.051	1.019
1	0.252	0.859	0.890	1.124	1.093
	0.250	0.844	0.875	1.114	1.083
1-1/8	0.252	0.986	1.017	1.251	1.220
	0.250	0.971	1.002	1.241	1.210
1-1/4	0.252	1.112	1.144	1.377	1.346
	0.250	1.097	1.129	1.367	1.336
1-3/8	0.377	1.201	1.232	1.528	1.497
	0.375	1.186	1.217	1.518	1.487
1-1/2	0.377	1.289	1.351	1.679	1.616
	0.375	1.274	1.336	1.669	1.606
1-5/8	0.377	1.416	1.478	1.806	1.743
	0.375	1.401	1.463	1.796	1.733
1-3/4	0.377	1.542	1.605	1.932	1.870
	0.375	1.527	1.590	1.922	1.860
1-7/8	0.502	1.591	1.654	2.106	2.044
	0.500	1.576	1.639	2.096	2.034
2	0.502	1.718	1.781	2.233	2.171
	0.500	1.703	1.766	2.223	2.161
2-1/4	0.502	1.972	2.034	2.487	2.424
	0.500	1.957	2.019	2.477	2.414
2-1/2	0.628	2.148	2.242	2.788	2.694
	0.625	2.133	2.227	2.778	2.684
2-3/4	0.628	2.402	2.495	3.042	2.948
	0.625	2.387	2.480	3.032	2.938
3	0.753	2.577	2.702	3.342	3.217
	0.750	2.562	2.687	3.332	3.207
3-1/4	0.753	2.831	2.956	3.596	3.471
	0.750	2.816	2.941	3.586	3.461
3-1/2	0.878	3.007	3.132	3.897	3.772
	0.875	2.992	3.117	3.887	3.762



Nominal Shaft Diameter	Shaft			Hub	
	Width W	Square S	Rectangular S	Square T	Rectangular T
3-3/4	0.878	3.261	3.386	4.151	4.026
	0.875	3.246	3.371	4.141	4.016
4	1.003	3.436	3.561	4.451	4.326
	1.000	3.421	3.546	4.441	4.316
4-1/4	1.003	3.690	3.815	4.705	4.580
	1.000	3.675	3.800	4.695	4.570
4-3/8	1.003	3.817	3.942	4.832	4.707
	1.000	3.802	3.927	4.822	4.697
4-1/2	1.003	3.944	4.069	4.959	4.834
	1.000	3.929	4.054	4.949	4.824
4-3/4	1.254	4.041	4.229	5.306	5.119
	1.250	4.026	4.214	5.296	5.109
4-7/8	1.254	4.169	4.356	5.434	5.246
	1.250	4.154	4.341	5.424	5.236
5	1.254	4.296	4.483	5.561	5.373
	1.250	4.281	4.468	5.551	5.363
5-1/4	1.254	4.550	4.737	5.815	5.627
	1.250	4.535	4.722	5.805	5.617
5-1/2	1.254	4.803	4.991	6.068	5.881
	1.250	4.788	4.976	6.058	5.871
5-3/4	1.504	4.900	5.150	6.415	6.165
	1.500	4.885	5.135	6.405	6.155
6	1.504	5.155	5.405	6.670	6.420
	1.500	5.140	5.390	6.660	6.410
6-1/4	1.504	5.409	5.659	6.924	6.674
	1.500	5.394	5.644	6.914	6.664
6-1/2	1.504	5.662	5.912	7.177	6.927
	1.500	5.647	5.897	7.167	6.917
6-3/4	1.754	5.760	5.885	7.525	7.400
	1.750	5.745	5.870	7.515	7.390
7	1.754	6.014	6.139	7.779	7.654
	1.750	5.999	6.124	7.769	7.644
7-1/4	1.754	6.268	6.393	8.033	7.908
	1.750	6.253	6.378	8.023	7.898
7-1/2	1.754	6.521	6.646	8.286	8.161
	1.750	6.506	6.631	8.276	8.151
7-3/4	2.004	6.619	6.869	8.634	8.384
	2.000	6.604	6.854	8.624	8.374
8	2.004	6.873	7.123	8.888	8.638
	2.000	6.858	7.108	8.878	8.628
9	2.004	7.887	8.137	9.902	9.652
	2.000	7.872	8.122	9.892	9.642
10	2.504	8.591	8.966	11.106	10.731
	2.500	8.576	8.951	11.096	10.721
11	2.504	9.606	9.981	12.121	11.746
	2.500	9.591	9.966	12.111	11.736

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