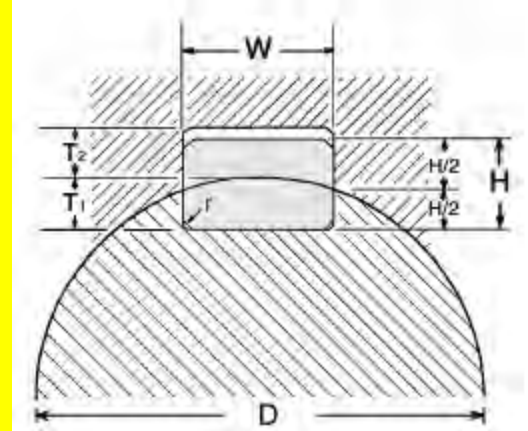


## Specifying Rectangular Keyways

Specifying and dimensioning metric keys and keyways varies significantly from the English and American systems. In the English and American system, it is the standard practice to specify the key size. In the English and American system, the keyway in the hub is dimensioned by the width and the depth at the side, but in the metric system the keyway is dimensioned by the width and the depth measured from the radius of the shaft to the center of the keyway. One of the following methods should be used to specify keyways:



Metric:  
 W x H Key  
 W x T<sub>2</sub> Keyway

British:  
 W x H/2 Key  
 W x T<sub>2</sub> Keyway

### ISO Standard — mm

Shaft Diameter		Groove Width	H	T1	T2*
D					
>	≤	W			
6	8	2	2	1.2	1
8	10	3	3	1.8	1.4
10	12	4	4	2.5	1.8
12	17	5	5	3.0	2.3
17	22	6	6	3.5	2.8
22	30	8	7	4.0	3.3
30	38	10	8	5.0	3.3
38	44	12	8	5.0	3.3
44	50	14	9	5.5	3.8
50	58	16	10	6.0	4.3
58	65	18	11	7.0	4.4
65	75	20	12	7.5	4.9
75	85	22	14	9.0	5.4
85	95	25	14	9.0	5.4
95	110	28	16	10.0	6.4
110	130	32	18	11.0	7.4
130	150	36	20	12.0	8.4
150	170	40	22	13.0	9.4
170	200	45	25	15.0	10.4
200	230	50	28	17.0	11.4
230	260	56	32	20.0	12.4
260	290	63	32	20.0	12.4
290	330	70	36	22.0	14.4
330	380	80	40	25.0	15.4
380	440	90	45	28.0	17.4
440	500	100	50	31.0	19.5

\* Groove dimensions for woodruff keys DIN 6888 in accordance with DIN 6885 Sheet 1 (with back clearance)

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In the absence of specific details, manufacturing will be based upon DIN 6885 - T1

### Imperial Standard — Inches

Shaft Diameter		Groove Width	H	T1	T2*
D					
>	≤	W			
1/4	1/2	1/8	1/8	0.072	0.060
1/2	3/4	3/16	3/16	0.107	0.088
3/4	1	1/4	1/4	0.142	0.115
1	1 1/4	5/16	1/4	0.146	0.112
1 1/4	1 1/2	3/8	1/4	0.150	0.108
1 1/2	1 3/4	7/16	5/16	0.186	0.135
1 3/4	2	1/2	5/16	0.190	0.131
2	2 1/2	3/8	7/16	0.260	0.185
2 1/2	3	1/2	1/2	0.299	0.209
3	3 1/2	7/8	3/8	0.370	0.264
3 1/2	4	1	3/4	0.441	0.318
4	5	1 1/4	7/8	0.518	0.366
5	6	1 1/2	1	0.599	0.412
6	7	1 3/4	1 1/4	0.740	0.526
7	8	2	1 3/8	0.818	0.573
8	9	2 1/4	1 1/2	0.897	0.619
9	10	2 1/2	1 5/8	0.975	0.666
10	11	2 3/4	1 7/8	1.114	0.777
11	12	3	2	1.195	0.823
12	13	3 1/4	2 1/8	1.273	0.87
13	14	3 1/2	2 3/8	1.413	0.98
14	15	3 3/4	2 1/2	1.492	1.026
15	16	4	2 5/8	1.571	1.072
16	17	4 1/4	2 7/8	1.711	1.182
17	18	4 1/2	3	1.791	1.229
18	19	4 3/4	3 1/8	1.868	1.277
19	20	5	3 3/8	2.010	1.385

# Tolerance each on T1 and T2 (1" - 14") is - .000/+ .006"

# Tolerance each on T1 and T2 (16" - 20") is - .000/+ .010"

Keyway Dimensions to BS 46 Part 1 - 1958