

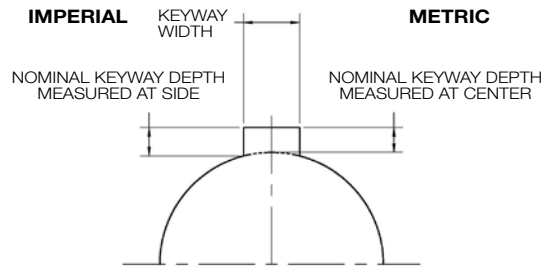
# Standard Bore Tolerances

## Imperial Standard Bore and Keyway Info

### Recommended Bore Tolerance for Imperial Shafts (Inches)

Nominal Shaft Range		Shaft Tol.	Interference Fit Bore Tol.	Clearance Fit Bore Tol.
Over	To (Incl.)			
.4375	1.5	+.0000 / -.0010	-.0005 / -.0010	+0.0010 / -.0000
1.5	2		-.0010 / -.0020	+0.0010 / -.0000
2	3		-.0010 / -.0020	+0.0015 / -.0000
3	4		-.0015 / -.0030	
4	5		-.0020 / -.0035	
5	7		-.0025 / -.0040	
7	8		-.0030 / -.0050	N/A
8	9		-.0035 / -.0055	N/A
9	10		-.0040 / -.0060	N/A

Reference AGMA 9002-B04



### Recommended Hub Keyway Dimensions (Inches)

Nominal Bore Range		Key Dims.		
Over	To (Incl.)	Width	Depth Square Key	Depth Reduced Key
0.312	0.438	0.094	0.047	-
0.438	0.562	0.125	0.063	0.047
0.562	0.875	0.188	0.094	0.062
0.875	1.250	0.25	0.125	0.094
1.250	1.375	0.312	0.156	0.125
1.375	1.750	0.375	0.188	0.125
1.750	2.250	0.500	0.250	0.188
2.250	2.750	0.625	0.313	0.219
2.750	3.250	0.750	0.375	0.250
3.250	3.750	0.875	0.438	0.313
3.750	4.500	1.000	0.500	0.375
4.500	5.500	1.250	0.625	0.438
5.500	6.500	1.500	0.750	0.500
6.500	7.500	1.750	0.875	0.750
7.500	9.000	2.000	1.000	0.750
9.000	11.000	2.500	1.250	0.875

Standard keyway fit is Commercial Class per AGMA 9002-B04

## Metric Standard Bore and Keyway Info

### Recommended Bore Tolerance for Metric Shafts (mm)

Nominal Shaft Range		Shaft Tol.	Shaft Des.	Clearance Fit		Interference Fit	
Over	To (Incl.)			Bore Tol.	Bore Des.	Bore Tol.	Bore Des.
12	18	+.008 / -.003	j6	+0.016 / +0.034	F7	-.015 / -.004	M6
19	30			+0.020 / +0.041	F7	-.017 / -.004	M6
32	50	+.018 / +.002	k6	+0.025 / +0.050	F7	-.013 / +0.003	K6
55	80			+0.030 / +0.060	F7	-.021 / +0.009	K7
85	100	+.035 / +.013	m6	+.036 / +.071	F7	-.035 / +0.000	M7
110	120					+.035 / +.013	-.059 / -.024
125	180	+.040 / +.015		+0.043 / +0.083	F7	-.068 / -.028	P7
190	200			+.046 / +.017	+.050 / +.096	F7	-.079 / -.033
210	225	-.109 / -.063					R7
230	250	-.113 / -.067					R7
260	280	+.052 / +.020		+.056 / +.108	F7	-.126 / -.074	R7

Reference AGMA 9112-A04

### Recommended Hub Keyway Dimensions (mm)

Nominal Bore Range		Nominal Key Size	Hub Keyway		
Over	To (Incl.)		Width	Depth	
				Nominal	Nominal
10	12	4X4	4	1.8	
12	17	5X5	5	2.3	
17	22	6X6	6	2.8	
22	30	8X7	8	3.3	
30	38	10X8	10	3.3	
38	44	12X8	12	3.3	
44	50	14X9	14	3.8	
50	58	16X10	16	4.3	
58	65	18X11	18	4.4	
65	75	20X12	20	4.9	
75	85	22X14	22	5.4	
85	95	25X15	25	5.4	
95	110	28X16	28	6.4	
110	130	32X18	32	7.4	
130	150	36X20	36	8.4	
150	170	40X22	40	9.4	
170	200	45X25	45	10.4	
200	230	50X28	50	11.4	
230	260	56X32	56	12.4	
260	290	63X32	63	12.4	

Standard metric keyway width tolerance per Js9