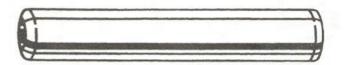
DOWEL PINS



Nominal Size or Nominal Pin Diameter		Α			В		С	R	Single Shear	Suggested Hole Diameter	
		Pin Diameter			Point Diameter		Crown Height	Crown Radius	Load - Carbon		
		Basic	Max	Min	Max	Min	Max	Min	lb.	Max	Min
1/8	.1250	0.1252	0.1253	0.1251	0.120	0.110	0.041	0.016	1,600	0.1250	0.1245
3/16	.1875	0.1877	0.1878	0.1876	0.180	0.170	0.062	0.023	3,600	0.1875	0.1870
1/4	.2500	0.2502	0.2503	0.2501	0.240	0.230	0.083	0.031	6,400	0.2500	0.2495
5/16	.3125	0.3127	0.3128	0.3126	0.302	0.290	0.104	0.039	10,000	0.3125	0.3120
3/8	.3750	0.3752	0.3753	0.3751	0.365	0.350	0.125	0.047	14,350	0.3750	0.3745
7/16	.4375	0.4377	0.4378	0.4376	0.424	0.409	0.146	0.055	19,550	0.4375	0.4370
1/2	.5000	0.5002	0.5003	0.5001	0.486	0.471	0.167	0.063	25,500	0.5000	04995
5/8	.6250	0.6252	0.6253	0.6251	0.611	0.595	0.208	0.078	39,900	0.6250	0.6245
3/4	.7500	0.7502	0.7503	0.7501	0.735	0.715	0.250	0.094	57,000	0.7500	0.7495
7/8	.8750	0.8752	0.8753	0.8751	0.860	0.840	0.293	0.109	78,000	0.8750	0.8745
1	1.0000	1.0002	1.0003	1.0001	0.980	0.960	0.333	0.125	102,000	1.0000	0.9995
Tolerance on Length					±0.010 in. (all sizes and						

Description	A solid headless straight pin with a closely controlled diameter. One end is chamfered with the other end radiuses to form a crown.						
Applications/ Advantages	Wide variety of uses, including as a plug gage, hinge or shaft. Precise tolerances of dowel pins make them excellent for achieving proper alignment of parts in high-speed assemblies, or as roller bearings in bus/truck wheel housings. Important Note: Dowel pins should be installed by being pressed in, not struck with an impact force.						
Material	Pins shall be made from any alloy steel capable of achieving the proper hardness requirements listed herein, having sulfur content of 0.05% maximum, and phosphorus content of 0.04% maximum.						
Heat Treatment	Pins shall be hardened by quenching in oil from austenitizing temperature and tempering to meet the proper Rockwell hardness and case depth.						
Core Hardness	Rockwell C 47 - 58						
Case Hardness	Rockwell C 60 minimum						
Case Depth	5/32 diameter & smaller: 0.010 in., minimum. 3/16 diameter and larger: 0.015 in. minimum.						
Finish	See Appendix-A for information about the various finishes for dowel pins.						