# Pin Standards

SPIROL PIN HOLE TOLERANCE
AND SHEAR STRENGTHS

| Nominal Diameter | Decimal Diminution | Recommended Drilled Hole Tolerance | | Minimum Double Shear lb. in. |
|---|---|---|---|---|
| | | Plus | Minus | |
| 1/32 | .031 | .001 | .000 | 75 |
| 1/16 | .062 | .003 | .001 | 300 |
| 3/32 | .094 | | | 700 |
| 1/8 | .125 | .004 | | 1250 |
| 5/32 | .156 | | | 1925 |
| 3/16 | .187 | .005 | .002 | 2800 |

GROOVE PIN HOLE TOLERANCES

| Pin Diameter in. | Decimal Equivalent | Recommended Drill Size in. | Hole Tolerance ADD To Nominal Diameter in. |
|---|---|---|---|
| 1/16 | .0625 | 1/16 | .002 |
| 5/64 | .0781 | 5/64 | |
| 3/32 | .0938 | 3/32 | .003 |
| 7/64 | .1094 | 7/64 | |
| 1/8 | .1250 | 1/8 | |
| 5/32 | .1563 | 5/32 | |
| 3/16 | .1875 | 3/16 | .004 |

Tolerances for drilled holes shown m table are based on depth to diameter ratio of approximately 5 to 1. Higher ratios may cause these figures to be exceeded, but in no case should they be exceeded by more than 10%. Specifications for holes having a depth to diameter ratio of 1 to 1 or less should be held extremely dose; 60% of figures shown in table is recommended.

GROOVE PIN TORQUE RATINGS

| Shaft Size | Pin Diameter | Torque lb. in. | Shaft Size | Pin Diameter | Torque lb. in. |
|---|---|---|---|---|---|
| 3/16 | 1/16 | 4.6 | 7/8 | 1/4 | 347 |
| 7/32 | 5/64 | 8.4 | 15/16 | 5/16 | 580 |
| 1/4 | 3/32 | 13.7 | 1 | | 618 |
| 5/16 | 7/64 | 23.6 | 1-1/16 | | 657 |
| 3/8 | 1/8 | 37.2 | 1-1/8 | 3/8 | 1010 |
| 7/16 | 5/32 | 67.6 | 1-3/16 | | 1065 |
| 1/2 | | 77.2 | 1-1/4 | | 1120 |
| 9/16 | 3/16 | 125.0 | 1-5/16 | 7/16 | 1590 |
| 5/8 | | 139.0 | 1-3/8 | | 1670 |
| 11/6 | 7/32 | 207.0 | 1-7/16 | | 1740 |

This table is a guide in selecting the proper size Driv-Lok Grooved Pin to use in keying machine members to shafts of given sizes and for specific load requirements. Torque and horsepower ratings are based on pins made of cold finished, low carbon steel and a safety factor of 8 is assumed.