

INTRODUCTION TO KNURLED PINS & STUDS

This specification sheet serves as an introduction to the Knurl Pin Family, to provide a base understanding of the various fastening options available. To identify the ideal fastening strategy for your need, contact DRIV-LOK. Our Enginomics team will craft a custom solution designed to maximize performance, safety, quality and savings.

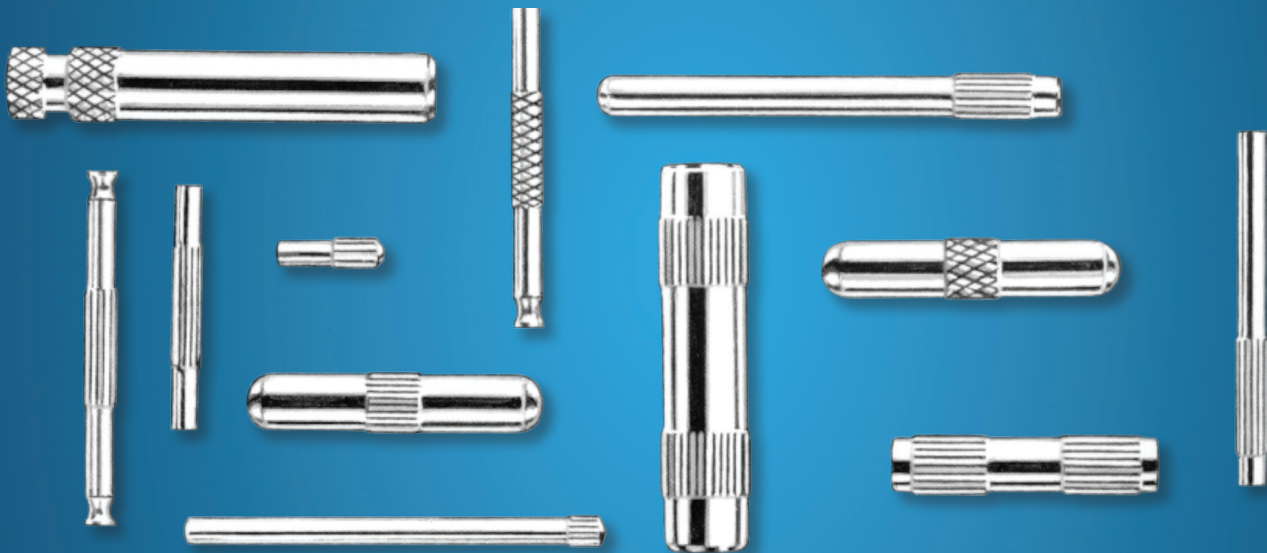
DESCRIPTION.

Knurled pins are similar to grooved pins because they have serration around the nominal diameter of the pin. The knurled pin differs from the grooved pin while there are many serrations on a knurled pin. Also, knurled pins are typically roll formed whereas grooved pins are swaged. A knurled section may have either a straight knurl, a helical knurl, or a diamond knurl configuration. Knurled pins are available with nominal diameters from 3/32" through 3/8" and lengths from 3/16" through 3".

FUNCTION.

The serrations on a knurled pin, when compressed by insertion into a hole, result in forces which hold the fastener in place. Radial forces are more evenly distributed around the diameter of a hole for knurled pins than for grooved pins. This is because a knurled pin has more points of contact with a hole than a grooved pin. The teeth may broach the mating hole when the material is softer and more ductile than the pin material.

The amount of expansion is predicated on the knurl pitch. Coarse knurls provide greater expansion than fine knurls. A knurled pin should have a minimum of 15 teeth to allow proper feed and rolling capability. The number of teeth must be a whole number to allow for proper tracking and avoid slivering. The capability on expanded diameter tolerance is +/- .002. Call for assistance in determining proper knurl pitch for your applications.



STANDARD KNURL PIN DIMENSIONS

Size	Nominal Diameter	Nominal Diameter	Available lengths in inches											Recommended hole size		
			1/4	3/16	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/4	2 1/2			
3/32	.0923/.0938	.099/.103	x	x	x	x	x									.0938/.0958
1/8	.123/.125	.131/.135	x	x	x	x	x	x								.125/.127
5/32	.1543/.1563	.164/.168	x	x	x	x	x	x	x							.1563/.1588
3/16	.1855/.1875	.196/.200		x	x	x	x	x	x	x	x					.1875/.1905
1/4	.248/.250	.259/.264			x	x	x	x	x	x	x	x				.250/.253
5/16	.3105/.3125	.322/.328				x	x	x	x	x	x	x	x			.3125/.3155
3/8	.373/.375	.386/.392					x	x	x	x	x	x	x	x		.375/.379

KNURL PIN

