## INTRODUCTION TO SPLIT & SEAMLESS HOLLOW DOWELS

This specification sheet serves as an introduction to Split Hollow Dowels, 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.

# SPLIT HOLLOW DOWELS

### DESCRIPTION

DRIV-LOK's split hollow dowels are designed and manufactured to provide excellent retention forces and ease of assembly. They can also be auto-inserted.

Split hollow dowels are ideal for use in conjunction with bolts that pass through the center of the dowel after it has been installed. This offers a weight savings over conventional locating dowels, which require separate drilled and reamed holes. The expense and labor involved in providing separate locating dowels and their holes in assemblies is eliminated. The bolt hole is counterbored on both halves of the assembly. The dowel is then installed into one of the counterbores and used to locate the other half of the assembly. "Split" hollow dowels offer additional cost savings over hollow dowels machined from tube or bar stock.



A typical application of the split hollow dowel is where two halves of an assembly are located and bolted together (cylinder heads to a block, valve bodies to a housing, clam shell assemblies, etc.) A DRIV-LOK split hollow dowel is also used as a **Compression Limiter** to protect plastic from being crushed or yielding past its elastic limit. When properly designed the bolt head or washer will allow proper seating of the bolt to hold the component in place and the compression limiter will absorb the clamping pressure.

Another application of a DRIV-LOK split hollow dowel is when used as a spacer or standoff to space components apart from one another. They have been used over shafts or bolts to give a set distance between component assemblies.

DRIV-LOK also produces split hollow dowels with special features. We have full press capabilities to pierce holes, slots, tabs and other features into the sidewall of a split hollow dowel.

DRIV-LOK's design engineering staff will work with you in providing technical assistance to develop the right fastener for your application.





#### **DIMENSIONAL CAPABILITIES.**

Diameter	Thickness												Laurath
	.015	.020	.025	.030	.035	.040	.045	.050	.060	.070	.080	.094	Length
5/32	х	х											.150-1.375
3⁄16	х	х	х										.150-1.375
7/32	Х	х	Х	Х									.150-1.375
1⁄4	Х	х	Х	Х	Х								.150-1.375
9/32	Х	х	Х	х	х	Х							.150-1.375
5⁄16	Х	х	х	х	х	х	х						.150-2.000
11/32	Х	х	Х	х	Х	Х	х	Х					.150-2.000
3/8	х	х	х	х	х	Х	х	х	х				.150-2.000
7⁄16	х	х	х	х	х	Х	х	х	х	х			.150-2.000
1/2	х	х	х	х	х	х	х	х	х	х	х		.150-2.000
9⁄16	Х	х	Х	Х	Х	Х	Х	Х	х	Х	Х		.150-2.000
5⁄8	х	х	х	х	х	х	х	х	х	х	х	х	.150-2.000
11/16	Х	х	Х	Х	Х	Х	Х	Х	х	х	Х	х	.150-2.000
3/4	Х	х	Х	Х	Х	Х	х	Х	х	х	х	х	.150-2.000
13/16	Х	х	Х	Х	Х	Х	х	Х	х	х	х	х	.150-2.000
7⁄8	Х	х	Х	Х	Х	Х	х	Х	х	х	х	Х	.150-2.000
15/16	Х	х	Х	Х	х	Х	х	Х	х	х	х	х	.150-2.000
1	Х	х	Х	Х	Х	Х	х	Х	х	х	х	х	.150-2.000
11/8	Х	х	Х	х	Х	Х	х	Х	х	х	х	х	.150-1.500
11⁄4	Х	х	Х	Х	Х	Х	х	х	х	х	х	х	.150-1.500
13/8	х	х	х	х	х	х	х	х	х	х	х	х	.150-1.500
11/2	х	х	х	х	х	х	х	х	х	х	х	х	.150-1.500

Standard capabilities, other sizes possible upon engineering review.

# SEAMLESS HOLLOW DOWELS

#### DESCRIPTION

Driv-Lok's seamless hollow dowels are an alternative to our split hollow dowels. They have similar uses to the split version, but do not have the split gap in them. Driv-Lok's seamless hollow dowels feature a ground diameter tolerance on the OD and have chamfers on the OD and ID of the dowel. When an application has fluid passing through or will not function correctly with a split gap the Driv-Lok seamless hollow dowel are ideal for locating holes in assemblies, or used as compression limiters.

### SIZES

Both the Driv-Lok Split Hollow Dowels and Seamless hollow dowels are made for the customers applications. Applications are generally designed around the size of bolt going through the I.D. of the part. Typical sizes range from bolts from ¼" to 5/8" or 6mm to 15mm. Contact Driv-Lok's Engineering staff for design assistance.

#### **COMMON MATERIAL**

- Split Hollow Dowels: SAE 1010, SAE 1074
- Seamless Hollow Dowels: SAE 1215, SAE 12L14



