

# INTRODUCTION TO BARB-LOK & FERROL PINS & STUDS

This specification sheet serves as an introduction to Barb-Lok and Ferrol Pins and Studs, 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.

## BARB-LOK PINS & STUDS

### DESCRIPTION.

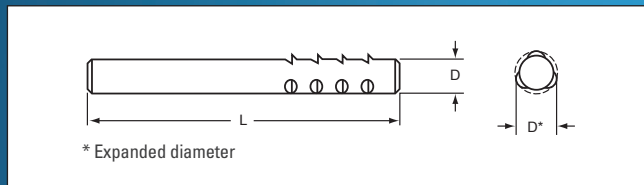
The barbs are located at 120° intervals on the diameter of the pin. The number of barbs along the length of the pin, and the distance between the barbs are determined by pin diameter and customer requirements. The crests of the barbs constitute the expanded diameter. The expanded diameter of the barbed pin is measured on the second barb from the end of the pin and is measured with a ring gage.

BARB-LOK Pins and Studs are made from low carbon steel or aluminum. Low carbon BARB-LOK Pins and Studs are zinc plated for corrosion resistance. Other finishes are available upon request.

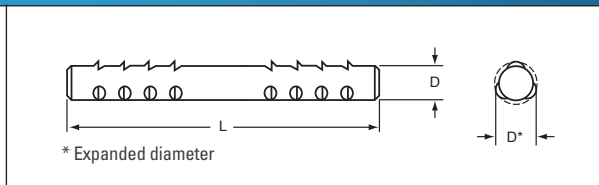
### FUNCTION.

Barbed pin holding power is affected by the pin diameter relative to the hole diameter and material hardness. The recommended hole size for most soft plastic applications is .001 to .005 below the nominal pin diameter. Hole sizes for hard plastic and aluminum applications should be greater than the nominal pin diameter. Specific hole sizes should be determined for each individual application. Ideal product for tamper-resistant applications.

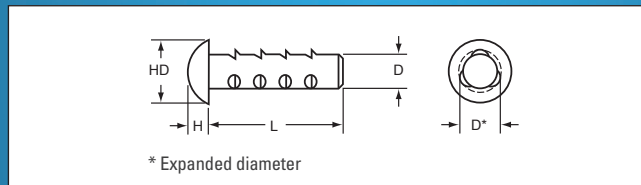
### TYPE 1 BARB-LOK PIN.



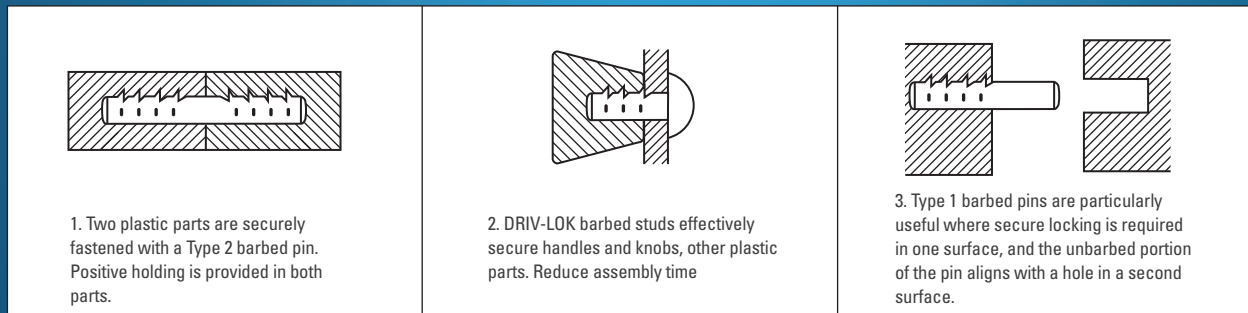
### TYPE 2 BARB-LOK PIN.



### BARB-LOK STUD.



### TYPICAL APPLICATIONS.



1. Two plastic parts are securely fastened with a Type 2 barbed pin. Positive holding is provided in both parts.

2. DRIV-LOK barbed studs effectively secure handles and knobs, other plastic parts. Reduce assembly time

3. Type 1 barbed pins are particularly useful where secure locking is required in one surface, and the unbarbed portion of the pin aligns with a hole in a second surface.

Above are just a few suggestions for saving fastening time and money, and improving products with DRIV-LOK barbed pins and barbed studs. Ask for samples to test in your applications.

# DRIV-LOK

# BARB-LOK PINS & STUDS

## STANDARD BARB-LOK PIN DIMENSIONS.

Size	Nominal Diameter	Expanded Diameter	Common Lengths												
			1/4	5/16	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/4	2 1/2		
3/32	.0923/.0938	.097/.110		x	x	x	x								
1/8	.123/.125	.133/.145			x	x	x	x	x						
5/32	.1543/.1563	.163/.175				x	x	x	x	x					
3/16	.1855/.1875	.197/.217				x	x	x	x	x	x				
1/4	.248/.250	.261/.281					x	x	x	x	x	x			
5/16	.3105/.3125	.323/.343						x	x	x	x	x	x		
3/8	.373/.375	.386/.406							x	x	x	x	x	x	

## STANDARD BARB-LOK STUD DIMENSIONS.

Stud no.	Nom. Shank diameter	Head diameter		Head height		Available lengths in inches										Expanded diameter	
		Max.	Min.	Max.	Min.	3/16	1/4	5/16	3/8	1/2	3/4	1	1 1/4	1 1/2	2		
2	0.086	0.162	0.146	0.070	0.059	x	x	x	x	x							.088/.095
4	0.104	0.211	0.193	0.0866	0.075	x	x	x	x	x	x						.107/.115
6	0.120	0.260	0.240	0.103	0.091		x	x	x	x	x						.124/.134
8	0.144	0.309	0.287	0.119	0.107				x	x	x	x					.149/.159
10	0.161	0.359	0.334	0.136	0.124				x	x	x	x	x				.166/.177
12	0.196	0.408	0.382	0.152	0.140					x	x	x	x	x			.202/.213
14	0.221	0.457	0.429	0.169	0.156					x	x	x	x	x	x		.227/.239
16	0.250	0.472	0.443	0.174	0.161					x	x	x	x	x	x	x	.258/.270

Driv-Lok BARB pin and stud designs have been used for over 15 years with no failures recorded in the field.

# DRIV-LOK

# FERROL PINS & STUDS

## DESCRIPTION.

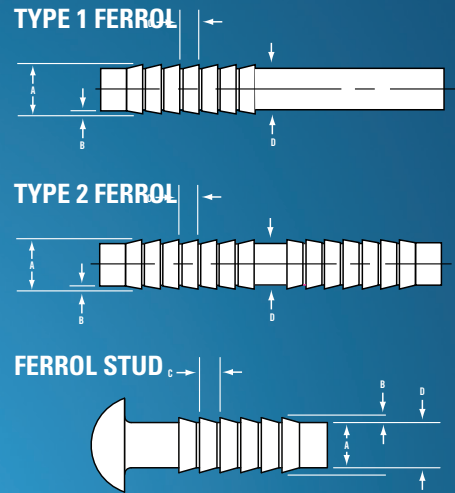
Driv-Lok Ferrol pins and studs have raised ferrol rings around the entire circumference of the pin. These rings are set at an angle that allows the pin to be inserted from one direction, but not removed from the opposite direction. They function similarly to Driv-Lok Barb-Lok pins and studs, but offer a more aggressive locking force. The crests of the ferrol rings constitute the expanded diameter and are measured with ring gauges.

## FUNCTION:

Driv-Lok Ferrol Pins and Studs can be inserted in all plastics and some soft metals or extrusions. The design of the application will determine which type of Driv-Lok Ferrol Pin or Stud should be used. Please contact a Driv-Lok application engineer for proper style and hole size recommendations. Driv-Lok Ferrol Pins are ideal for long-term positive locking of components, and are excellent for tamper resistant applications.

## MATERIALS.

Driv-Lok Ferrol Pins and Studs can be made from Low Carbon, Aluminum and Stainless Steel. They can come with a plain rust preventative, Zinc plating or Passivation. Other finishes available upon request.



## STANDARD FERROL PIN DIMENSIONS.

Size	Nominal Diameter	Expanded Diameter	Common Lengths												
			3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/4	2 1/2				
3/32	.0923/.0938	.097/.110	x	x	x										
1/8	.123/.125	.133/.145		x	x	x	x								
5/32	.1543/.1563	.163/.175		x	x	x	x								
3/16	.1855/.1875	.197/.217		x	x	x	x	x							
1/4	.248/.250	.261/.281		x	x	x	x	x	x						
5/16	.3105/.3125	.323/.343			x	x	x	x	x	x					
3/8	.373/.375	.386/.406				x	x	x	x	x	x				x

## STANDARD FERROL STUD DIMENSIONS.

Stud no.	Nom. Shank Diameter	Head diameter		Head height		Available lengths in inches									Expanded Diameter	
		Max.	Min.	Max.	Min.	1/4	5/16	3/8	1/2	3/4	1	1 1/4	1 1/2	1 3/4		
2	0.086	0.162	0.146	0.070	0.059	x	x									.094/.100
4	0.104	0.211	0.193	0.0866	0.075			x	x	x	x					.117/.122
6	0.120	0.260	0.240	0.103	0.091			x	x	x	x	x				.136/.142
8	0.144	0.309	0.287	0.119	0.107				x	x	x	x	x			.161/.168
10	0.161	0.359	0.334	0.136	0.124				x	x	x	x	x			.181/.188
12	0.196	0.408	0.382	0.152	0.140				x	x	x	x	x	x		.220/.229
14	0.221	0.457	0.429	0.169	0.156					x	x	x	x	x		.248/.258
16	0.250	0.472	0.443	0.174	0.161						x	x	x	x		.275/.285