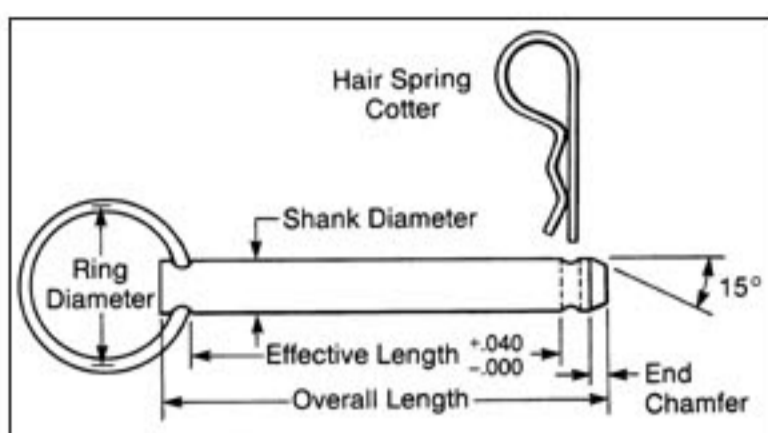


Ring Pins

Made to order. Convenient removable pin designed with a cotter hole for a secure application. Used typically with a hair spring cotter, this fastener offers fast and secure adjustments or assemblies. Available with or without a stop collar in various styles and sizes.



Check out our new **Bow-Tie™ Locking Cotter!**



Standard material is 12L14 carbon steel, zinc plated. Higher carbon steel which can be treated is available or corrosion-resistant stainless on request.

Ring Pin Specs

A Nominal Pin Dia.	Diameter Tolerances Before Plating Cold Finished Rounds		Pull Ring Dia. (Inches)	End Chamfer Length x 15° (Inches)	Pivot Point Standard Hole Diameter	Recommended Bow-Tie Cotter
	Carbon Steel	Stainless				
3/16	.1855-.1875	.1865-.1885	7/8	0.078	3/32	
1/4	.2480-.2500	.2490-.2510	1	0.094	3/32	Bow-72
5/16	.3105-.3125	.3110-.3140	1	0.125	1/8	"Bow-72,91"
3/8	.3730-.3750	.3735-.3765	1	0.141	9/64	Bow-91
7/16	.4355-.4375	.4360-.4390	1	0.156	5/32	Bow-120
1/2	.4980-.5000	.4980-.5020	1-1/4	0.172	5/32	Bow-120
5/8	.6230-.6250	.6230-.6270	1-1/4	0.188	5/32	
3/4	.7480-.7500	.7480-.7520	1-1/2	0.188	3/16	
	Plating will typically add					
	.0002 ^{mm} -.0005 ^{mm}					
	to diameter.	" Unless otherwise noted, all dimensions are for reference only."				

Washer Collars.

Standard zinc-plated flat washers stamped firmly into a groove for a permanent stop. Assembly is completely plated.



Optional Collar (washer) Stamped Groove

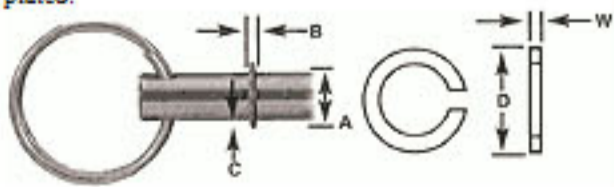
Fits Pin Dia.

USS Standard Washer Dimensions (Inches)

Fits Pin Dia.	USS Standard Washer Dimensions (Inches)			
	Size	I.D.	O.D.	Thickness
3/16	5/32*	3/16	7/16	0.047
1/4	3/16	1/4	9/16	0.047
5/16	1/4	5/16	3/4	0.062
3/8	5/16	3/8	7/8	0.078
7/16	3/8	7/16	1	0.078
1/2	7/16	1/2	1-1/4	0.078
5/8	9/16	5/8	1-1/2	0.109
3/4	9/16	3/4**	1-1/2	0.109
	*SAE Standard for No. 8 **Bored to fit.			
	"Unless otherwise noted, all dimensions are for reference only."			

Crimp Collars.

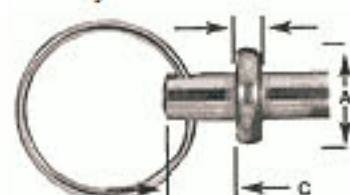
Crimp collars are small diameter retaining rings made of ductile 1010 carbon steel. Pressed into a groove the collar is generally free to rotate, yet strong against end thrust. Assembly is completely plated.



A Fits Pin Dia.	Groove Dimensions		Ring Dimensions	
	B Width	C Depth	W Width	D O.D. Installed
3/16	0.034	0.031	0.031	0.250
1/4	0.034	0.031	0.031	0.312
5/16	0.043	0.031	0.039	0.406
3/8	0.052	0.031	0.047	0.500
7/16	0.060	0.031	0.055	0.594
1/2	0.069	0.031	0.063	0.688
5/8	0.086	0.039	0.078	0.859
3/4	0.103	0.047	0.094	1.031
Tolerances	+(-).002	+(-).002	+0.002/-0.004	Ref

Headed Collars.

One piece cold formed pin and collar for the highest durability.



A Collar Dia.	B Collar Height	C
5/16	.090	.50
7/16	.090	.50
1/2	.090	.75
5/8	.100	.75
3/8	.125	.75
7/8	.125	.75