

## QUICK RELEASE BALL LOCK PINS

# Material Specifications

for the standard pins shown in our catalog

	17-4 SS PINS	304 SS PINS	STEEL ALLOY 4130 PINS
SHANK	CRES 17-4PH (Stainless Steel) (AMS-5643) Heat Treated Min. RC-40 Tensile Strength = 190,000 lb/in <sup>2</sup> Yield Strength = 170,000 lb/in <sup>2</sup> Passivated Finish	CRES 304 (Stainless Steel) (AMS-5639)  Tensile Strength = 75,000 lb/in <sup>2</sup> Yield Strength = 30,000 lb/in <sup>2</sup> Passivated Finish	4130 (Alloy Steel) (AMS-6360) Heat Treated RC36-40 Tensile Strength = 186,000 lb/in <sup>2</sup> Yield Strength = 173,000 lb/in <sup>2</sup> Cadmium Plate Finish (Yellow Chromate)
SPINDLE (Internal)	CRES 17-4PH (Stainless Steel) (AMS-5643) Heat Treated Min. RC-40 Tensile Strength = 190,000 lb/in <sup>2</sup> Yield Strength = 170,000 lb/in <sup>2</sup> Passivated Finish	CRES 17-4PH (Stainless Steel) (AMS-5643) Heat Treated Min. RC-40 Tensile Strength = 190,000 lb/in <sup>2</sup> Yield Strength = 170,000 lb/in <sup>2</sup> Passivated Finish	CRES 17-4PH (Stainless Steel) (AMS-5643) Heat Treated Min. RC-40 Tensile Strength = 190,000 lb/in <sup>2</sup> Yield Strength = 170,000 lb/in <sup>2</sup> Passivated Finish
HANDLES* (Ring & Button)	Aluminum 2024-T4 (ASTM-B211) Anodized Finish (Black)	Aluminum 2024-T4 (ASTM-B211) Anodized Finish (Black)	Aluminum 2024-T4 (ASTM-B211) Anodized Finish (Black)
HANDLES (T & L)	Aluminum 380 Die Cast (ASTM-B85) Anodized Finish (Black)	Aluminum 380 Die Cast (ASTM-B85) Anodized Finish (Black)	Aluminum 380 Die Cast (ASTM-B85) Anodized Finish (Black)
WEAR COLLAR	CRES 303 (Stainless Steel) (ASTM-A581) Passivated Finish	CRES 303 (Stainless Steel) (ASTM-A581) Passivated Finish	CRES 303 (Stainless Steel) (ASTM-A581) Passivated Finish
ACTUATOR BUTTON**	Aluminum 2024-T4 (ASTM-B211) Anodized Finish (Blue)	Aluminum 2024-T4 (ASTM-B211) Anodized Finish (Blue)	Aluminum 2024-T4 (ASTM-B211) Anodized Finish (Blue)
SPRING (Internal)	CRES 302 (Stainless Steel) (ASTM-A313) Passivated Finish	CRES 302 (Stainless Steel) (ASTM-A313) Passivated Finish	CRES 302 (Stainless Steel) (ASTM-A313) Passivated Finish
BALLS	CRES 440C (Stainless Steel) (QQ-S-763) Heat Treated - RC (58-62) Passivated Finish	CRES 440C (Stainless Steel) (QQ-S-763) Heat Treated - RC (58-62) Passivated Finish	CRES 440C (Stainless Steel) (QQ-S-763) Heat Treated - RC (58-62) Passivated Finish
BAIL (Ring Handle)	CRES 302 (Stainless Steel) (ASTM-A313) Passivated Finish	CRES 302 (Stainless Steel) (ASTM-A313) Passivated Finish	CRES 302 (Stainless Steel) (ASTM-A313) Passivated Finish
SPLIT RING	CRES 302 (Stainless Steel) (ASTM-A313) Passivated Finish	CRES 302 (Stainless Steel) (ASTM-A313) Passivated Finish	CRES 302 (Stainless Steel) (ASTM-A313) Passivated Finish

\*Note: When a stainless Ring or Button handle is specified, the material will be CRES-303 (Stainless).

\*\*Note: When a stainless Ring or Button handle is specified, the actuator button will be made from CRES-303 (Stainless).

## Hole Size / Performance Data

Dia	Hole Size		Approx. Pull-Out Strength (lbs)	Calculated Double Shear (lbs)		
	Max	Min		4130 Steel	17-4 Stainless	304 Stainless
3/16	.1940	.1900	200	4,600	5,150	—
1/4	.2540	.2500	230	8,200	9,200	2,200
5/16	.3165	.3125	510	12,800	14,400	3,500
3/8	.3790	.3750	575	18,400	20,600	4,500
1/2	.5050	.5000	1,160	32,800	36,800	11,500