

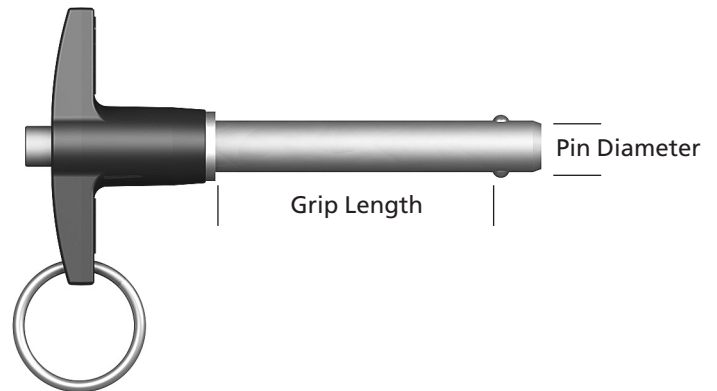
Selecting the proper Quick Release Ball Lock Pin

1. Select the proper pin diameter.

Our standard inch sizes are 3/16", 1/4", 5/16", 3/8", 1/2" and 5/8". Our standard metric sizes are 5mm, 6mm, 8mm, 10mm, 12mm and 16mm.

2. Select the proper grip length.

The grip length (also referred to as the useable length) is measured from the bottom of the handle to the top of the locking balls. Our standard inch grip lengths range from 1/2" up to 6" and our metric grip lengths range from 10mm up to 100mm depending on the diameter.



3. Select the proper shank material.

17-4 SS – Made from heat treated 17-4 stainless steel, they are designed for applications where higher shear strengths are required. Because they are made from stainless steel, they offer superior corrosion resistance over alloy steel. This combination of strength and corrosion resistance makes it a good choice for a wide range of demanding applications.

300 Series Stainless Steel – Made from 300 series stainless, these pins are not designed to be used where shear strengths are demanding. While these pins offer lower shear strengths than other materials, they are strong enough to meet the needs for many applications. This material also offers very good corrosion resistance.

4130 Alloy Steel – Made from heat treated and plated 4130 alloy steel, these pins are ideal where high strength is required and environmental factors are not an issue.

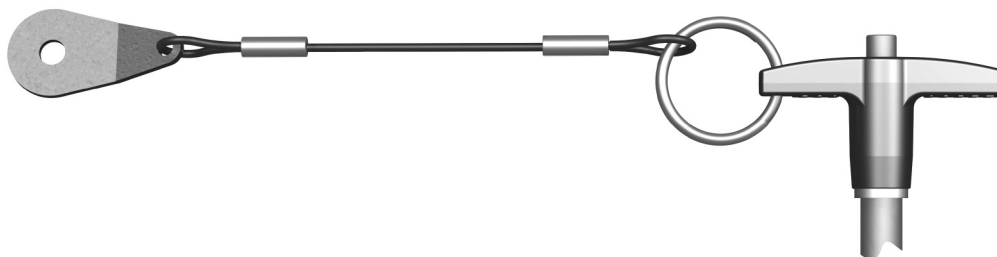
4. Select the proper handle style.

Handle choice is based on clearance, use and appearance. Our handles are made from either aluminum alloy or stainless steel. The aluminum handles are anodized black and are available in Ring, Button, L and T configurations. Stainless handles are available in Ring, Button and Nautical Recessed configurations.



5. Select lanyard assembly.

Lanyard assemblies are used to attach the pin to a fixture so it does not get misplaced while the pin is not in use. The lanyard assemblies must be ordered separately.



Material Specifications

| | 17-4 SS PINS | 300 SERIES SS PINS | STEEL ALLOY 4130 PINS |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SHANK – Inch | CRES 17-4PH (Stainless Steel) (AMS-5643) (UNS S17400) (DIN 1.4542) Heat Treated Min. RC-40 Tensile Strength = 190,000 lb/in ² Minimum Passivated Finish | CRES 304 (Stainless Steel) (AMS-5639) (UNS S530400) (DIN 1.4301) or CRES 303 (Stainless Steel) (AMS-5640) (UNS S30300) (DIN 1.4305) Tensile Strength = 73,000 lb/in ² Minimum Passivated Finish | 4130 (Alloy Steel) (AMS-6370) (UNS G41300) (DIN 1.7218) Heat Treated RC36-40 Tensile Strength = 160,000 to 180,000 lb/in ² Cadmium Plate Finish (Yellow Chromate) |
| SHANK – Metric | CRES 17-4PH (Stainless Steel) (AMS-5643) (UNS S17400) (DIN 1.4542) Heat Treated Min. RC-40 Tensile Strength = 190,000 lb/in ² Minimum Passivated Finish | ————— | ————— |
| SPINDLE (Internal) | CRES 17-4PH (Stainless Steel) (AMS-5643) (UNS S17400) (DIN 1.4542) Heat Treated Min. RC-40 Tensile Strength = 190,000 lb/in ² Minimum Passivated Finish | CRES 17-4PH (Stainless Steel) (AMS-5643) (UNS S17400) (DIN 1.4542) Heat Treated Min. RC-40 Tensile Strength = 190,000 lb/in ² Minimum Passivated Finish | CRES 17-4PH (Stainless Steel) (AMS-5643) (UNS S17400) (DIN 1.4542) Heat Treated Min. RC-40 Tensile Strength = 190,000 lb/in ² Minimum Passivated Finish |
| HANDLES (Aluminum Ring & Button) | Aluminum 2024-T4 (ASTM-B211) (UNS A92024) (DIN AlCuMg2) Anodized Finish (Black) | Aluminum 2024-T4 (ASTM-B211) (UNS A92024) (DIN AlCuMg2) Anodized Finish (Black) | Aluminum 2024-T4 (ASTM-B211) (UNS A92024) (DIN AlCuMg2) Anodized Finish (Black) |
| HANDLES (Stainless Ring, Button & Nautical Recessed) | CRES 303 Stainless Steel (ASTM-A581) (UNS S30300) (DIN 1.4305) Passivated Finish | CRES 303 Stainless Steel (ASTM-A581) (UNS S30300) (DIN 1.4305) Passivated Finish | ————— |
| HANDLES (T & L) | Aluminum 380 Die Cast (ASTM-B85) (UNS A03800) (DIN AlSi9Cu3) Anodized Finish (Black) | Aluminum 380 Die Cast (ASTM-B85) (UNS A03800) (DIN AlSi9Cu3) Anodized Finish (Black) | Aluminum 380 Die Cast (ASTM-B85) (UNS A03800) (DIN AlSi9Cu3) Anodized Finish (Black) |
| WEAR COLLAR | CRES 303 (Stainless Steel) (ASTM-A581) (UNS S30300) (DIN 1.4305) Passivated Finish | CRES 303 (Stainless Steel) (ASTM-A581) (UNS S30300) (DIN 1.4305) Passivated Finish | CRES 303 (Stainless Steel) (ASTM-A581) (UNS S30300) (DIN 1.4305) Passivated Finish |
| ACTUATOR BUTTON* | Aluminum 2024-T4 (ASTM-B211) (UNS A92024) (DIN AlCuMg2) Anodized Finish (Blue) | Aluminum 2024-T4 (ASTM-B211) (UNS A92024) (DIN AlCuMg2) Anodized Finish (Blue) | Aluminum 2024-T4 (ASTM-B211) (UNS A92024) (DIN AlCuMg2) Anodized Finish (Blue) |
| SPRING (Internal) | CRES 302 (Stainless Steel) (ASTM-A313) (UNS S30200) (DIN 1.4300) Passivated Finish | CRES 302 (Stainless Steel) (ASTM-A313) (UNS S30200) (DIN 1.4300) Passivated Finish | CRES 302 (Stainless Steel) (ASTM-A313) (UNS S30200) (DIN 1.4300) Passivated Finish |
| BALLS | CRES 440C (Stainless Steel) (QQ-S-763) (UNS S44004) (DIN 1.4125) Heat Treated -RC (58-62) Passivated Finish | CRES 440C (Stainless Steel) (QQ-S-763) (UNS S44004) (DIN 1.4125) Heat Treated -RC (58-62) Passivated Finish | CRES 440C (Stainless Steel) (QQ-S-763) (UNS S44004) (DIN 1.4125) Heat Treated -RC (58-62) Passivated Finish |
| BAIL (Ring Handle) | CRES 302 (Stainless Steel) (ASTM-A313) (UNS S30200) (DIN 1.4300) Passivated Finish | CRES 302 (Stainless Steel) (ASTM-A313) (UNS S30200) (DIN 1.4300) Passivated Finish | CRES 302 (Stainless Steel) (ASTM-A313) (UNS S30200) (DIN 1.4300) Passivated Finish |
| SPLIT RING | CRES 302 (Stainless Steel) (ASTM-A313) (UNS S30200) (DIN 1.4300) Passivated Finish | CRES 302 (Stainless Steel) (ASTM-A313) (UNS S30200) (DIN 1.4300) Passivated Finish | CRES 302 (Stainless Steel) (ASTM-A313) (UNS S30200) (DIN 1.4300) Passivated Finish |

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

Hole Size / Performance Data

Inch

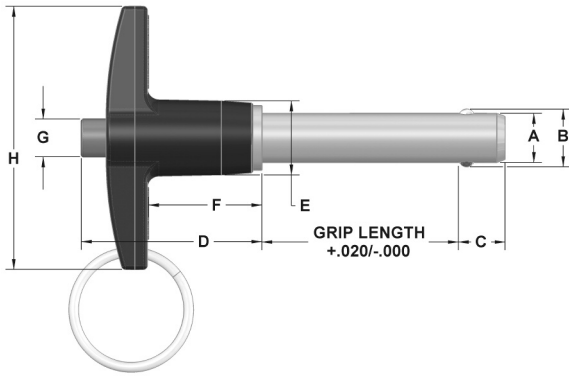
| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 3/16 | .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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

Metric

| Dia | Hole Size | | Min. Pull-Out Strength (N) | Calculated Double Shear (N) |
|-----|-----------|--------|----------------------------|-----------------------------|
| | Max mm | Min mm | | |
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

T-Handle | Inch



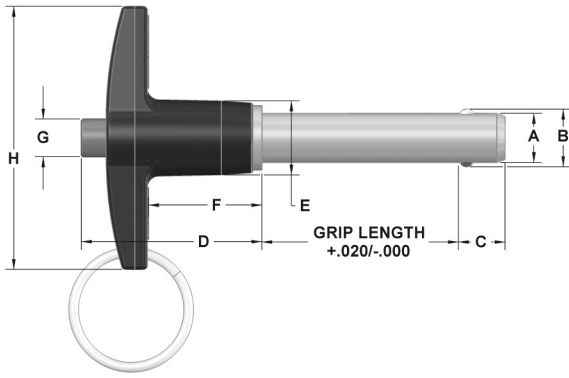
| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 3/16 | .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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. They are available in three shank materials to meet your application. The handles for the pins listed below are made from 380 aluminum casting and anodized black. The pins are supplied with a stainless steel split ring for attaching a cable assembly. Pins in other grip lengths are available as special orders. See page 2 for complete specifications.

| 4130 Steel Part # | 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/-0.005 B | +0.000/-0.030 C | D | E | F | G | H |
|-------------------|----------------|----------------------|------------------|-------|-------|-------------|------------|-----------------|------|-----|-----|-----|------|
| TAAS-18-050 | TACH-18-050 | — | 3/16 | .1885 | .1870 | .50 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-18-075 | TACH-18-075 | — | 3/16 | .1885 | .1870 | .75 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-18-100 | TACH-18-100 | — | 3/16 | .1885 | .1870 | 1.00 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-18-125 | TACH-18-125 | — | 3/16 | .1885 | .1870 | 1.25 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-18-150 | TACH-18-150 | — | 3/16 | .1885 | .1870 | 1.50 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-18-175 | TACH-18-175 | — | 3/16 | .1885 | .1870 | 1.75 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-18-200 | TACH-18-200 | — | 3/16 | .1885 | .1870 | 2.00 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-18-250 | TACH-18-250 | — | 3/16 | .1885 | .1870 | 2.50 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-18-300 | TACH-18-300 | — | 3/16 | .1885 | .1870 | 3.00 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-18-350 | TACH-18-350 | — | 3/16 | .1885 | .1870 | 3.50 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-18-400 | TACH-18-400 | — | 3/16 | .1885 | .1870 | 4.00 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-25-050 | TACH-25-050 | TACS-25-050 | 1/4 | .2485 | .2470 | .50 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-25-075 | TACH-25-075 | TACS-25-075 | 1/4 | .2485 | .2470 | .75 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-25-100 | TACH-25-100 | TACS-25-100 | 1/4 | .2485 | .2470 | 1.00 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-25-125 | TACH-25-125 | TACS-25-125 | 1/4 | .2485 | .2470 | 1.25 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-25-150 | TACH-25-150 | TACS-25-150 | 1/4 | .2485 | .2470 | 1.50 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-25-175 | TACH-25-175 | TACS-25-175 | 1/4 | .2485 | .2470 | 1.75 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-25-200 | TACH-25-200 | TACS-25-200 | 1/4 | .2485 | .2470 | 2.00 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-25-250 | TACH-25-250 | TACS-25-250 | 1/4 | .2485 | .2470 | 2.50 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-25-300 | TACH-25-300 | TACS-25-300 | 1/4 | .2485 | .2470 | 3.00 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-25-350 | TACH-25-350 | TACS-25-350 | 1/4 | .2485 | .2470 | 3.50 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-25-400 | TACH-25-400 | TACS-25-400 | 1/4 | .2485 | .2470 | 4.00 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-31-050 | TACH-31-050 | TACS-31-050 | 5/16 | .3110 | .3095 | .50 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-31-075 | TACH-31-075 | TACS-31-075 | 5/16 | .3110 | .3095 | .75 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-31-100 | TACH-31-100 | TACS-31-100 | 5/16 | .3110 | .3095 | 1.00 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-31-125 | TACH-31-125 | TACS-31-125 | 5/16 | .3110 | .3095 | 1.25 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-31-150 | TACH-31-150 | TACS-31-150 | 5/16 | .3110 | .3095 | 1.50 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-31-175 | TACH-31-175 | TACS-31-175 | 5/16 | .3110 | .3095 | 1.75 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-31-200 | TACH-31-200 | TACS-31-200 | 5/16 | .3110 | .3095 | 2.00 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-31-250 | TACH-31-250 | TACS-31-250 | 5/16 | .3110 | .3095 | 2.50 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-31-300 | TACH-31-300 | TACS-31-300 | 5/16 | .3110 | .3095 | 3.00 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-31-350 | TACH-31-350 | TACS-31-350 | 5/16 | .3110 | .3095 | 3.50 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.81 |
| TAAS-31-400 | TACH-31-400 | TACS-31-400 | 5/16 | .3110 | .3095 | 4.00 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.81 |

T-Handle | Inch (continued)

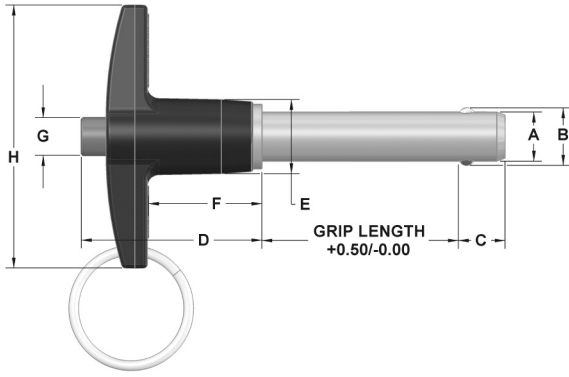


| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|-------------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

| 4130 Steel Part # | 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/- .005 B | + .000/- .030 C | D | E | F | G | H |
|-------------------|----------------|----------------------|------------------|-------|-------|-------------|------------|-----------------|------|-----|------|-----|------|
| TAAS-37-050 | TACH-37-050 | TACS-37-050 | 3/8 | .3735 | .3720 | .50 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.00 |
| TAAS-37-075 | TACH-37-075 | TACS-37-075 | 3/8 | .3735 | .3720 | .75 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.00 |
| TAAS-37-100 | TACH-37-100 | TACS-37-100 | 3/8 | .3735 | .3720 | 1.00 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.00 |
| TAAS-37-125 | TACH-37-125 | TACS-37-125 | 3/8 | .3735 | .3720 | 1.25 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.00 |
| TAAS-37-150 | TACH-37-150 | TACS-37-150 | 3/8 | .3735 | .3720 | 1.50 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.00 |
| TAAS-37-175 | TACH-37-175 | TACS-37-175 | 3/8 | .3735 | .3720 | 1.75 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.00 |
| TAAS-37-200 | TACH-37-200 | TACS-37-200 | 3/8 | .3735 | .3720 | 2.00 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.00 |
| TAAS-37-250 | TACH-37-250 | TACS-37-250 | 3/8 | .3735 | .3720 | 2.50 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.00 |
| TAAS-37-300 | TACH-37-300 | TACS-37-300 | 3/8 | .3735 | .3720 | 3.00 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.00 |
| TAAS-37-350 | TACH-37-350 | TACS-37-350 | 3/8 | .3735 | .3720 | 3.50 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.00 |
| TAAS-37-400 | TACH-37-400 | TACS-37-400 | 3/8 | .3735 | .3720 | 4.00 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.00 |
| TAAS-50-100 | TACH-50-100 | TACS-50-100 | 1/2 | .4985 | .4970 | 1.00 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.25 |
| TAAS-50-125 | TACH-50-125 | TACS-50-125 | 1/2 | .4985 | .4970 | 1.25 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.25 |
| TAAS-50-150 | TACH-50-150 | TACS-50-150 | 1/2 | .4985 | .4970 | 1.50 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.25 |
| TAAS-50-175 | TACH-50-175 | TACS-50-175 | 1/2 | .4985 | .4970 | 1.75 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.25 |
| TAAS-50-200 | TACH-50-200 | TACS-50-200 | 1/2 | .4985 | .4970 | 2.00 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.25 |
| TAAS-50-250 | TACH-50-250 | TACS-50-250 | 1/2 | .4985 | .4970 | 2.50 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.25 |
| TAAS-50-300 | TACH-50-300 | TACS-50-300 | 1/2 | .4985 | .4970 | 3.00 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.25 |
| TAAS-50-350 | TACH-50-350 | TACS-50-350 | 1/2 | .4985 | .4970 | 3.50 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.25 |
| TAAS-50-400 | TACH-50-400 | TACS-50-400 | 1/2 | .4985 | .4970 | 4.00 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.25 |
| TAAS-50-450 | TACH-50-450 | TACS-50-450 | 1/2 | .4985 | .4970 | 4.50 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.25 |
| TAAS-50-500 | TACH-50-500 | TACS-50-500 | 1/2 | .4985 | .4970 | 5.00 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.25 |
| TAAS-50-550 | TACH-50-550 | TACS-50-550 | 1/2 | .4985 | .4970 | 5.50 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.25 |
| TAAS-50-600 | TACH-50-600 | TACS-50-600 | 1/2 | .4985 | .4970 | 6.00 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.25 |
| TAAS-62-150 | TACH-62-150 | — | 5/8 | .6235 | .6220 | 1.50 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 3.07 |
| TAAS-62-175 | TACH-62-175 | — | 5/8 | .6235 | .6220 | 1.75 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 3.07 |
| TAAS-62-200 | TACH-62-200 | — | 5/8 | .6235 | .6220 | 2.00 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 3.07 |
| TAAS-62-250 | TACH-62-250 | — | 5/8 | .6235 | .6220 | 2.50 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 3.07 |
| TAAS-62-300 | TACH-62-300 | — | 5/8 | .6235 | .6220 | 3.00 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 3.07 |
| TAAS-62-350 | TACH-62-350 | — | 5/8 | .6235 | .6220 | 3.50 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 3.07 |
| TAAS-62-400 | TACH-62-400 | — | 5/8 | .6235 | .6220 | 4.00 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 3.07 |
| TAAS-62-450 | TACH-62-450 | — | 5/8 | .6235 | .6220 | 4.50 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 3.07 |
| TAAS-62-500 | TACH-62-500 | — | 5/8 | .6235 | .6220 | 5.00 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 3.07 |
| TAAS-62-550 | TACH-62-550 | — | 5/8 | .6235 | .6220 | 5.50 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 3.07 |
| TAAS-62-600 | TACH-62-600 | — | 5/8 | .6235 | .6220 | 6.00 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 3.07 |

T-Handle | Metric

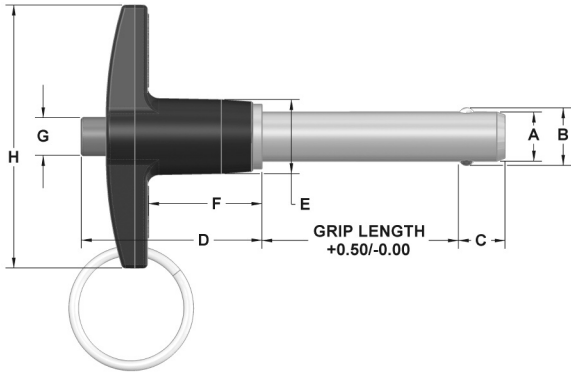


| Dia mm | Hole Size Max mm | Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|--------|------------------|--------|----------------------------|--------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. The shanks are made from 17-4PH stainless steel. The handles for the pins listed below are made from 380 aluminum casting and anodized black. The pins are supplied with a stainless steel split ring for attaching a cable assembly. Pins in other grip lengths are available as special orders. See page 2 for complete specifications. Compliant to RoHS requirements.

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | F mm | G mm | H mm |
|----------------|---------------------|----------|----------|----------------|--------------|-------------|------|------|------|------|------|
| MTACH-05-010 | 5 | 4.96 | 4.92 | 10 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-05-015 | 5 | 4.96 | 4.92 | 15 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-05-020 | 5 | 4.96 | 4.92 | 20 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-05-025 | 5 | 4.96 | 4.92 | 25 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-05-030 | 5 | 4.96 | 4.92 | 30 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-05-035 | 5 | 4.96 | 4.92 | 35 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-05-040 | 5 | 4.96 | 4.92 | 40 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-05-045 | 5 | 4.96 | 4.92 | 45 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-05-050 | 5 | 4.96 | 4.92 | 50 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-05-060 | 5 | 4.96 | 4.92 | 60 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-05-070 | 5 | 4.96 | 4.92 | 70 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-05-080 | 5 | 4.96 | 4.92 | 80 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-05-090 | 5 | 4.96 | 4.92 | 90 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-05-100 | 5 | 4.96 | 4.92 | 100 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-010 | 6 | 5.96 | 5.92 | 10 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-015 | 6 | 5.96 | 5.92 | 15 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-020 | 6 | 5.96 | 5.92 | 20 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-025 | 6 | 5.96 | 5.92 | 25 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-030 | 6 | 5.96 | 5.92 | 30 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-035 | 6 | 5.96 | 5.92 | 35 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-040 | 6 | 5.96 | 5.92 | 40 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-045 | 6 | 5.96 | 5.92 | 45 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-050 | 6 | 5.96 | 5.92 | 50 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-060 | 6 | 5.96 | 5.92 | 60 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-070 | 6 | 5.96 | 5.92 | 70 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-080 | 6 | 5.96 | 5.92 | 80 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-090 | 6 | 5.96 | 5.92 | 90 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-06-100 | 6 | 5.96 | 5.92 | 100 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-010 | 8 | 7.96 | 7.92 | 10 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-015 | 8 | 7.96 | 7.92 | 15 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-020 | 8 | 7.96 | 7.92 | 20 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-025 | 8 | 7.96 | 7.92 | 25 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-030 | 8 | 7.96 | 7.92 | 30 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-035 | 8 | 7.96 | 7.92 | 35 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-040 | 8 | 7.96 | 7.92 | 40 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-045 | 8 | 7.96 | 7.92 | 45 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-050 | 8 | 7.96 | 7.92 | 50 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-060 | 8 | 7.96 | 7.92 | 60 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-070 | 8 | 7.96 | 7.92 | 70 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-080 | 8 | 7.96 | 7.92 | 80 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-090 | 8 | 7.96 | 7.92 | 90 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |
| MTACH-08-100 | 8 | 7.96 | 7.92 | 100 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46 |

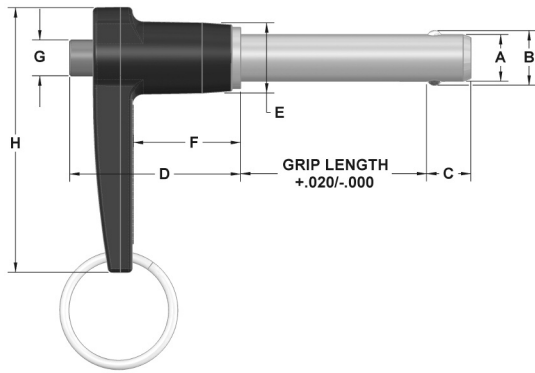
T-Handle | Metric (continued)



| Dia mm | Hole Size Max mm | Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|--------|------------------|--------|----------------------------|--------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | F mm | G mm | H mm |
|----------------|---------------------|----------|----------|----------------|--------------|-------------|------|------|------|------|------|
| MTACH-10-015 | 10 | 9.96 | 9.92 | 15 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 50.8 |
| MTACH-10-020 | 10 | 9.96 | 9.92 | 20 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 50.8 |
| MTACH-10-025 | 10 | 9.96 | 9.92 | 25 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 50.8 |
| MTACH-10-030 | 10 | 9.96 | 9.92 | 30 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 50.8 |
| MTACH-10-035 | 10 | 9.96 | 9.92 | 35 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 50.8 |
| MTACH-10-040 | 10 | 9.96 | 9.92 | 40 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 50.8 |
| MTACH-10-045 | 10 | 9.96 | 9.92 | 45 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 50.8 |
| MTACH-10-050 | 10 | 9.96 | 9.92 | 50 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 50.8 |
| MTACH-10-060 | 10 | 9.96 | 9.92 | 60 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 50.8 |
| MTACH-10-070 | 10 | 9.96 | 9.92 | 70 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 50.8 |
| MTACH-10-080 | 10 | 9.96 | 9.92 | 80 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 50.8 |
| MTACH-10-090 | 10 | 9.96 | 9.92 | 90 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 50.8 |
| MTACH-10-100 | 10 | 9.96 | 9.92 | 100 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 50.8 |
| MTACH-12-020 | 12 | 11.96 | 11.92 | 20 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 57.2 |
| MTACH-12-025 | 12 | 11.96 | 11.92 | 25 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 57.2 |
| MTACH-12-030 | 12 | 11.96 | 11.92 | 30 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 57.2 |
| MTACH-12-035 | 12 | 11.96 | 11.92 | 35 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 57.2 |
| MTACH-12-040 | 12 | 11.96 | 11.92 | 40 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 57.2 |
| MTACH-12-045 | 12 | 11.96 | 11.92 | 45 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 57.2 |
| MTACH-12-050 | 12 | 11.96 | 11.92 | 50 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 57.2 |
| MTACH-12-060 | 12 | 11.96 | 11.92 | 60 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 57.2 |
| MTACH-12-070 | 12 | 11.96 | 11.92 | 70 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 57.2 |
| MTACH-12-080 | 12 | 11.96 | 11.92 | 80 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 57.2 |
| MTACH-12-090 | 12 | 11.96 | 11.92 | 90 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 57.2 |
| MTACH-12-100 | 12 | 11.96 | 11.92 | 100 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 57.2 |
| MTACH-16-025 | 16 | 15.96 | 15.92 | 25 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 78 |
| MTACH-16-030 | 16 | 15.96 | 15.92 | 30 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 78 |
| MTACH-16-035 | 16 | 15.96 | 15.92 | 35 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 78 |
| MTACH-16-040 | 16 | 15.96 | 15.92 | 40 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 78 |
| MTACH-16-045 | 16 | 15.96 | 15.92 | 45 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 78 |
| MTACH-16-050 | 16 | 15.96 | 15.92 | 50 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 78 |
| MTACH-16-060 | 16 | 15.96 | 15.92 | 60 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 78 |
| MTACH-16-070 | 16 | 15.96 | 15.92 | 70 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 78 |
| MTACH-16-080 | 16 | 15.96 | 15.92 | 80 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 78 |
| MTACH-16-090 | 16 | 15.96 | 15.92 | 90 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 78 |
| MTACH-16-100 | 16 | 15.96 | 15.92 | 100 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 78 |

L-Handle | Inch



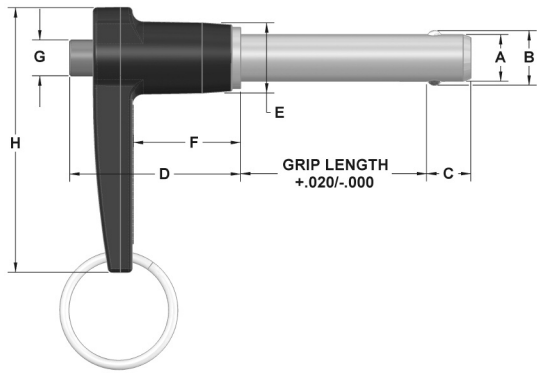
| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|-------------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. They are available in three shank materials to meet your application. The handles for the pins listed below are made from 380 aluminum casting and anodized black. The pins are supplied with a stainless steel split ring for attaching a cable assembly. Pins in other grip lengths are available as special orders. See page 2 for complete specifications.

| 4130 Steel Part # | 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/-0.005 B | +0.000/-0.030 C | D | E | F | G | H |
|-------------------|----------------|----------------------|------------------|-------|-------|-------------|------------|-----------------|------|-----|-----|-----|------|
| LAAS-18-050 | LACH-18-050 | — | 3/16 | .1885 | .1870 | .50 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-18-075 | LACH-18-075 | — | 3/16 | .1885 | .1870 | .75 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-18-100 | LACH-18-100 | — | 3/16 | .1885 | .1870 | 1.00 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-18-125 | LACH-18-125 | — | 3/16 | .1885 | .1870 | 1.25 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-18-150 | LACH-18-150 | — | 3/16 | .1885 | .1870 | 1.50 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-18-175 | LACH-18-175 | — | 3/16 | .1885 | .1870 | 1.75 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-18-200 | LACH-18-200 | — | 3/16 | .1885 | .1870 | 2.00 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-18-250 | LACH-18-250 | — | 3/16 | .1885 | .1870 | 2.50 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-18-300 | LACH-18-300 | — | 3/16 | .1885 | .1870 | 3.00 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-18-350 | LACH-18-350 | — | 3/16 | .1885 | .1870 | 3.50 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-18-400 | LACH-18-400 | — | 3/16 | .1885 | .1870 | 4.00 | .220 | .260 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-25-050 | LACH-25-050 | LACS-25-050 | 1/4 | .2485 | .2470 | .50 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-25-075 | LACH-25-075 | LACS-25-075 | 1/4 | .2485 | .2470 | .75 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-25-100 | LACH-25-100 | LACS-25-100 | 1/4 | .2485 | .2470 | 1.00 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-25-125 | LACH-25-125 | LACS-25-125 | 1/4 | .2485 | .2470 | 1.25 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-25-150 | LACH-25-150 | LACS-25-150 | 1/4 | .2485 | .2470 | 1.50 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-25-175 | LACH-25-175 | LACS-25-175 | 1/4 | .2485 | .2470 | 1.75 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-25-200 | LACH-25-200 | LACS-25-200 | 1/4 | .2485 | .2470 | 2.00 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-25-250 | LACH-25-250 | LACS-25-250 | 1/4 | .2485 | .2470 | 2.50 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-25-300 | LACH-25-300 | LACS-25-300 | 1/4 | .2485 | .2470 | 3.00 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-25-350 | LACH-25-350 | LACS-25-350 | 1/4 | .2485 | .2470 | 3.50 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-25-400 | LACH-25-400 | LACS-25-400 | 1/4 | .2485 | .2470 | 4.00 | .289 | .290 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-31-050 | LACH-31-050 | LACS-31-050 | 5/16 | .3110 | .3095 | .50 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-31-075 | LACH-31-075 | LACS-31-075 | 5/16 | .3110 | .3095 | .75 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-31-100 | LACH-31-100 | LACS-31-100 | 5/16 | .3110 | .3095 | 1.00 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-31-125 | LACH-31-125 | LACS-31-125 | 5/16 | .3110 | .3095 | 1.25 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-31-150 | LACH-31-150 | LACS-31-150 | 5/16 | .3110 | .3095 | 1.50 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-31-175 | LACH-31-175 | LACS-31-175 | 5/16 | .3110 | .3095 | 1.75 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-31-200 | LACH-31-200 | LACS-31-200 | 5/16 | .3110 | .3095 | 2.00 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-31-250 | LACH-31-250 | LACS-31-250 | 5/16 | .3110 | .3095 | 2.50 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-31-300 | LACH-31-300 | LACS-31-300 | 5/16 | .3110 | .3095 | 3.00 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-31-350 | LACH-31-350 | LACS-31-350 | 5/16 | .3110 | .3095 | 3.50 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.84 |
| LAAS-31-400 | LACH-31-400 | LACS-31-400 | 5/16 | .3110 | .3095 | 4.00 | .375 | .330 | 1.21 | .47 | .76 | .23 | 1.84 |

L-Handle | Inch (continued)

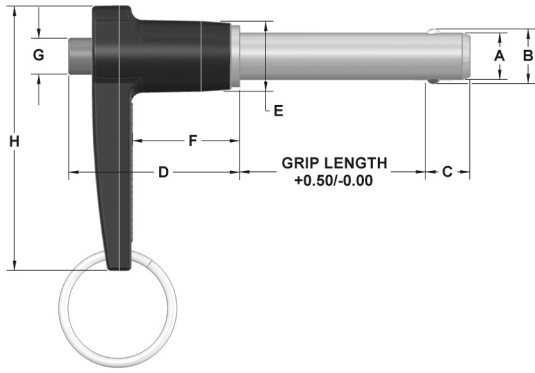


| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 3/16 | .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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

| 4130 Steel Part # | 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/- .005 B | + .000/- .030 C | D | E | F | G | H |
|-------------------|----------------|----------------------|------------------|-------|-------|-------------|------------|-----------------|------|-----|------|-----|------|
| LAAS-37-050 | LACH-37-050 | LACS-37-050 | 3/8 | .3735 | .3720 | .50 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.13 |
| LAAS-37-075 | LACH-37-075 | LACS-37-075 | 3/8 | .3735 | .3720 | .75 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.13 |
| LAAS-37-100 | LACH-37-100 | LACS-37-100 | 3/8 | .3735 | .3720 | 1.00 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.13 |
| LAAS-37-125 | LACH-37-125 | LACS-37-125 | 3/8 | .3735 | .3720 | 1.25 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.13 |
| LAAS-37-150 | LACH-37-150 | LACS-37-150 | 3/8 | .3735 | .3720 | 1.50 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.13 |
| LAAS-37-175 | LACH-37-175 | LACS-37-175 | 3/8 | .3735 | .3720 | 1.75 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.13 |
| LAAS-37-200 | LACH-37-200 | LACS-37-200 | 3/8 | .3735 | .3720 | 2.00 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.13 |
| LAAS-37-250 | LACH-37-250 | LACS-37-250 | 3/8 | .3735 | .3720 | 2.50 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.13 |
| LAAS-37-300 | LACH-37-300 | LACS-37-300 | 3/8 | .3735 | .3720 | 3.00 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.13 |
| LAAS-37-350 | LACH-37-350 | LACS-37-350 | 3/8 | .3735 | .3720 | 3.50 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.13 |
| LAAS-37-400 | LACH-37-400 | LACS-37-400 | 3/8 | .3735 | .3720 | 4.00 | .440 | .365 | 1.37 | .56 | .87 | .29 | 2.13 |
| LAAS-50-100 | LACH-50-100 | LACS-50-100 | 1/2 | .4985 | .4970 | 1.00 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.37 |
| LAAS-50-125 | LACH-50-125 | LACS-50-125 | 1/2 | .4985 | .4970 | 1.25 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.37 |
| LAAS-50-150 | LACH-50-150 | LACS-50-150 | 1/2 | .4985 | .4970 | 1.50 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.37 |
| LAAS-50-175 | LACH-50-175 | LACS-50-175 | 1/2 | .4985 | .4970 | 1.75 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.37 |
| LAAS-50-200 | LACH-50-200 | LACS-50-200 | 1/2 | .4985 | .4970 | 2.00 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.37 |
| LAAS-50-250 | LACH-50-250 | LACS-50-250 | 1/2 | .4985 | .4970 | 2.50 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.37 |
| LAAS-50-300 | LACH-50-300 | LACS-50-300 | 1/2 | .4985 | .4970 | 3.00 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.37 |
| LAAS-50-350 | LACH-50-350 | LACS-50-350 | 1/2 | .4985 | .4970 | 3.50 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.37 |
| LAAS-50-400 | LACH-50-400 | LACS-50-400 | 1/2 | .4985 | .4970 | 4.00 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.37 |
| LAAS-50-450 | LACH-50-450 | LACS-50-450 | 1/2 | .4985 | .4970 | 4.50 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.37 |
| LAAS-50-500 | LACH-50-500 | LACS-50-500 | 1/2 | .4985 | .4970 | 5.00 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.37 |
| LAAS-50-550 | LACH-50-550 | LACS-50-550 | 1/2 | .4985 | .4970 | 5.50 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.37 |
| LAAS-50-600 | LACH-50-600 | LACS-50-600 | 1/2 | .4985 | .4970 | 6.00 | .594 | .460 | 1.60 | .72 | 1.00 | .42 | 2.37 |
| LAAS-62-150 | LACH-62-150 | — | 5/8 | .6235 | .6220 | 1.50 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 2.69 |
| LAAS-62-175 | LACH-62-175 | — | 5/8 | .6235 | .6220 | 1.75 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 2.69 |
| LAAS-62-200 | LACH-62-200 | — | 5/8 | .6235 | .6220 | 2.00 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 2.69 |
| LAAS-62-250 | LACH-62-250 | — | 5/8 | .6235 | .6220 | 2.50 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 2.69 |
| LAAS-62-300 | LACH-62-300 | — | 5/8 | .6235 | .6220 | 3.00 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 2.69 |
| LAAS-62-350 | LACH-62-350 | — | 5/8 | .6235 | .6220 | 3.50 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 2.69 |
| LAAS-62-400 | LACH-62-400 | — | 5/8 | .6235 | .6220 | 4.00 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 2.69 |
| LAAS-62-450 | LACH-62-450 | — | 5/8 | .6235 | .6220 | 4.50 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 2.69 |
| LAAS-62-500 | LACH-62-500 | — | 5/8 | .6235 | .6220 | 5.00 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 2.69 |
| LAAS-62-550 | LACH-62-550 | — | 5/8 | .6235 | .6220 | 5.50 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 2.69 |
| LAAS-62-600 | LACH-62-600 | — | 5/8 | .6235 | .6220 | 6.00 | .750 | .580 | 1.77 | .94 | 1.11 | .54 | 2.69 |

L-Handle | Metric

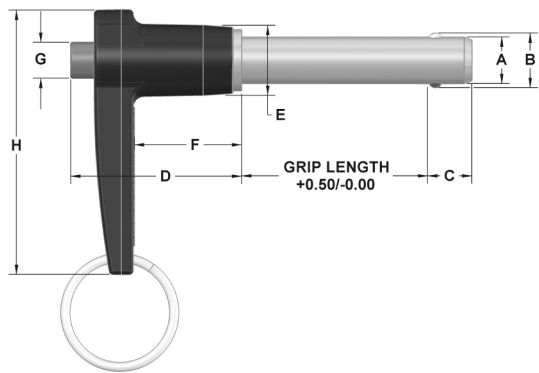


| Dia mm | Hole Size Max mm | Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|-----------|------------------------|-----------|----------------------------------|--------------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. The shanks are made from 17-4PH stainless steel. The handles for the pins listed below are made from 380 aluminum casting and anodized black. The pins are supplied with a stainless steel split ring for attaching a cable assembly. Pins in other grip lengths are available as special orders. See page 2 for complete specifications. Compliant to RoHS requirements.

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | F mm | G mm | H mm |
|-------------------|---------------------------|----------------|----------------|----------------------|--------------------|-------------------|---------|---------|---------|---------|---------|
| MLACH-05-010 | 5 | 4.96 | 4.92 | 10 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-05-015 | 5 | 4.96 | 4.92 | 15 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-05-020 | 5 | 4.96 | 4.92 | 20 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-05-025 | 5 | 4.96 | 4.92 | 25 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-05-030 | 5 | 4.96 | 4.92 | 30 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-05-035 | 5 | 4.96 | 4.92 | 35 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-05-040 | 5 | 4.96 | 4.92 | 40 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-05-045 | 5 | 4.96 | 4.92 | 45 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-05-050 | 5 | 4.96 | 4.92 | 50 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-05-060 | 5 | 4.96 | 4.92 | 60 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-05-070 | 5 | 4.96 | 4.92 | 70 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-05-080 | 5 | 4.96 | 4.92 | 80 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-05-090 | 5 | 4.96 | 4.92 | 90 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-05-100 | 5 | 4.96 | 4.92 | 100 | 5.54 | 6 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-010 | 6 | 5.96 | 5.92 | 10 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-015 | 6 | 5.96 | 5.92 | 15 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-020 | 6 | 5.96 | 5.92 | 20 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-025 | 6 | 5.96 | 5.92 | 25 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-030 | 6 | 5.96 | 5.92 | 30 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-035 | 6 | 5.96 | 5.92 | 35 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-040 | 6 | 5.96 | 5.92 | 40 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-045 | 6 | 5.96 | 5.92 | 45 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-050 | 6 | 5.96 | 5.92 | 50 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-060 | 6 | 5.96 | 5.92 | 60 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-070 | 6 | 5.96 | 5.92 | 70 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-080 | 6 | 5.96 | 5.92 | 80 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-090 | 6 | 5.96 | 5.92 | 90 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-06-100 | 6 | 5.96 | 5.92 | 100 | 6.99 | 7 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-010 | 8 | 7.96 | 7.92 | 10 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-015 | 8 | 7.96 | 7.92 | 15 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-020 | 8 | 7.96 | 7.92 | 20 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-025 | 8 | 7.96 | 7.92 | 25 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-030 | 8 | 7.96 | 7.92 | 30 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-035 | 8 | 7.96 | 7.92 | 35 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-040 | 8 | 7.96 | 7.92 | 40 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-045 | 8 | 7.96 | 7.92 | 45 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-050 | 8 | 7.96 | 7.92 | 50 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-060 | 8 | 7.96 | 7.92 | 60 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-070 | 8 | 7.96 | 7.92 | 70 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-080 | 8 | 7.96 | 7.92 | 80 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-090 | 8 | 7.96 | 7.92 | 90 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |
| MLACH-08-100 | 8 | 7.96 | 7.92 | 100 | 9.42 | 8 | 30.7 | 11.9 | 19.3 | 5.8 | 46.7 |

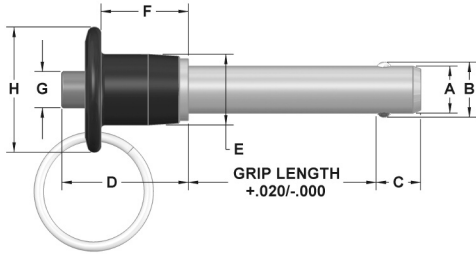
L-Handle | Metric (continued)



| Dia mm | Hole Size Max mm | Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|-----------|------------------------|-----------|----------------------------------|--------------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | F mm | G mm | H mm |
|-------------------|---------------------------|----------------|----------------|----------------------|--------------------|-------------------|---------|---------|---------|---------|---------|
| MLACH-10-015 | 10 | 9.96 | 9.92 | 15 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 54.1 |
| MLACH-10-020 | 10 | 9.96 | 9.92 | 20 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 54.1 |
| MLACH-10-025 | 10 | 9.96 | 9.92 | 25 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 54.1 |
| MLACH-10-030 | 10 | 9.96 | 9.92 | 30 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 54.1 |
| MLACH-10-035 | 10 | 9.96 | 9.92 | 35 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 54.1 |
| MLACH-10-040 | 10 | 9.96 | 9.92 | 40 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 54.1 |
| MLACH-10-045 | 10 | 9.96 | 9.92 | 45 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 54.1 |
| MLACH-10-050 | 10 | 9.96 | 9.92 | 50 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 54.1 |
| MLACH-10-060 | 10 | 9.96 | 9.92 | 60 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 54.1 |
| MLACH-10-070 | 10 | 9.96 | 9.92 | 70 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 54.1 |
| MLACH-10-080 | 10 | 9.96 | 9.92 | 80 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 54.1 |
| MLACH-10-090 | 10 | 9.96 | 9.92 | 90 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 54.1 |
| MLACH-10-100 | 10 | 9.96 | 9.92 | 100 | 11.86 | 9 | 34.8 | 14.2 | 22.1 | 7.4 | 54.1 |
| MLACH-12-020 | 12 | 11.96 | 11.92 | 20 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 60.2 |
| MLACH-12-025 | 12 | 11.96 | 11.92 | 25 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 60.2 |
| MLACH-12-030 | 12 | 11.96 | 11.92 | 30 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 60.2 |
| MLACH-12-035 | 12 | 11.96 | 11.92 | 35 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 60.2 |
| MLACH-12-040 | 12 | 11.96 | 11.92 | 40 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 60.2 |
| MLACH-12-045 | 12 | 11.96 | 11.92 | 45 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 60.2 |
| MLACH-12-050 | 12 | 11.96 | 11.92 | 50 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 60.2 |
| MLACH-12-060 | 12 | 11.96 | 11.92 | 60 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 60.2 |
| MLACH-12-070 | 12 | 11.96 | 11.92 | 70 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 60.2 |
| MLACH-12-080 | 12 | 11.96 | 11.92 | 80 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 60.2 |
| MLACH-12-090 | 12 | 11.96 | 11.92 | 90 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 60.2 |
| MLACH-12-100 | 12 | 11.96 | 11.92 | 100 | 14.45 | 10 | 40.6 | 18.3 | 25.4 | 10.7 | 60.2 |
| MLACH-16-025 | 16 | 15.96 | 15.92 | 25 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 68.3 |
| MLACH-16-030 | 16 | 15.96 | 15.92 | 30 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 68.3 |
| MLACH-16-035 | 16 | 15.96 | 15.92 | 35 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 68.3 |
| MLACH-16-040 | 16 | 15.96 | 15.92 | 40 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 68.3 |
| MLACH-16-045 | 16 | 15.96 | 15.92 | 45 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 68.3 |
| MLACH-16-050 | 16 | 15.96 | 15.92 | 50 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 68.3 |
| MLACH-16-060 | 16 | 15.96 | 15.92 | 60 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 68.3 |
| MLACH-16-070 | 16 | 15.96 | 15.92 | 70 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 68.3 |
| MLACH-16-080 | 16 | 15.96 | 15.92 | 80 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 68.3 |
| MLACH-16-090 | 16 | 15.96 | 15.92 | 90 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 68.3 |
| MLACH-16-100 | 16 | 15.96 | 15.92 | 100 | 19 | 14 | 45 | 23.9 | 28.2 | 13.7 | 68.3 |

Aluminum Button Handle | Inch



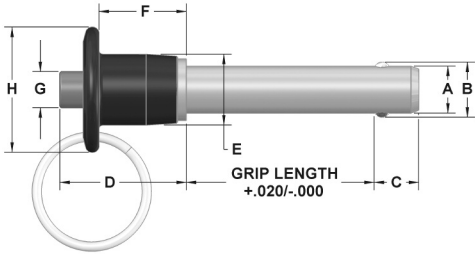
| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 3/16 | .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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. They are available in three shank materials to meet your application. The handles for the pins listed below are made from 2024-T4 aluminum and anodized black. The pins are supplied with a stainless steel split ring for attaching a cable assembly. Pins in other grip lengths are available as special orders. See page 2 for complete specifications.

| 4130 Steel Part # | 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/-0.005 B | +0.000/-0.030 C | D | E | F | G | H |
|-------------------|----------------|----------------------|------------------|-------|-------|-------------|------------|-----------------|-----|-----|-----|-----|-----|
| BAAS-18-050 | BACH-18-050 | — | 3/16 | .1885 | .1870 | .50 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BAAS-18-075 | BACH-18-075 | — | 3/16 | .1885 | .1870 | .75 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BAAS-18-100 | BACH-18-100 | — | 3/16 | .1885 | .1870 | 1.00 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BAAS-18-125 | BACH-18-125 | — | 3/16 | .1885 | .1870 | 1.25 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BAAS-18-150 | BACH-18-150 | — | 3/16 | .1885 | .1870 | 1.50 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BAAS-18-175 | BACH-18-175 | — | 3/16 | .1885 | .1870 | 1.75 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BAAS-18-200 | BACH-18-200 | — | 3/16 | .1885 | .1870 | 2.00 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BAAS-18-250 | BACH-18-250 | — | 3/16 | .1885 | .1870 | 2.50 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BAAS-18-300 | BACH-18-300 | — | 3/16 | .1885 | .1870 | 3.00 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BAAS-18-350 | BACH-18-350 | — | 3/16 | .1885 | .1870 | 3.50 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BAAS-18-400 | BACH-18-400 | — | 3/16 | .1885 | .1870 | 4.00 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BAAS-25-050 | BACH-25-050 | BACS-25-050 | 1/4 | .2485 | .2470 | .50 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BAAS-25-075 | BACH-25-075 | BACS-25-075 | 1/4 | .2485 | .2470 | .75 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BAAS-25-100 | BACH-25-100 | BACS-25-100 | 1/4 | .2485 | .2470 | 1.00 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BAAS-25-125 | BACH-25-125 | BACS-25-125 | 1/4 | .2485 | .2470 | 1.25 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BAAS-25-150 | BACH-25-150 | BACS-25-150 | 1/4 | .2485 | .2470 | 1.50 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BAAS-25-175 | BACH-25-175 | BACS-25-175 | 1/4 | .2485 | .2470 | 1.75 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BAAS-25-200 | BACH-25-200 | BACS-25-200 | 1/4 | .2485 | .2470 | 2.00 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BAAS-25-250 | BACH-25-250 | BACS-25-250 | 1/4 | .2485 | .2470 | 2.50 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BAAS-25-300 | BACH-25-300 | BACS-25-300 | 1/4 | .2485 | .2470 | 3.00 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BAAS-25-350 | BACH-25-350 | BACS-25-350 | 1/4 | .2485 | .2470 | 3.50 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BAAS-25-400 | BACH-25-400 | BACS-25-400 | 1/4 | .2485 | .2470 | 4.00 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BAAS-31-050 | BACH-31-050 | BACS-31-050 | 5/16 | .3110 | .3095 | .50 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BAAS-31-075 | BACH-31-075 | BACS-31-075 | 5/16 | .3110 | .3095 | .75 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BAAS-31-100 | BACH-31-100 | BACS-31-100 | 5/16 | .3110 | .3095 | 1.00 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BAAS-31-125 | BACH-31-125 | BACS-31-125 | 5/16 | .3110 | .3095 | 1.25 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BAAS-31-150 | BACH-31-150 | BACS-31-150 | 5/16 | .3110 | .3095 | 1.50 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BAAS-31-175 | BACH-31-175 | BACS-31-175 | 5/16 | .3110 | .3095 | 1.75 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BAAS-31-200 | BACH-31-200 | BACS-31-200 | 5/16 | .3110 | .3095 | 2.00 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BAAS-31-250 | BACH-31-250 | BACS-31-250 | 5/16 | .3110 | .3095 | 2.50 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BAAS-31-300 | BACH-31-300 | BACS-31-300 | 5/16 | .3110 | .3095 | 3.00 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BAAS-31-350 | BACH-31-350 | BACS-31-350 | 5/16 | .3110 | .3095 | 3.50 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BAAS-31-400 | BACH-31-400 | BACS-31-400 | 5/16 | .3110 | .3095 | 4.00 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |

Aluminum Button Handle | Inch (continued)

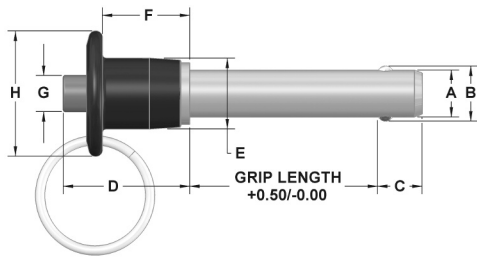


| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 3/16 | .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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

| 4130 Steel Part # | 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/-0.005 B | +0.000/-0.030 C | D | E | F | G | H |
|-------------------|----------------|----------------------|------------------|-------|-------|-------------|------------|-----------------|------|-----|------|-----|------|
| BAAS-37-050 | BACH-37-050 | BACS-37-050 | 3/8 | .3735 | .3720 | .50 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BAAS-37-075 | BACH-37-075 | BACS-37-075 | 3/8 | .3735 | .3720 | .75 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BAAS-37-100 | BACH-37-100 | BACS-37-100 | 3/8 | .3735 | .3720 | 1.00 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BAAS-37-125 | BACH-37-125 | BACS-37-125 | 3/8 | .3735 | .3720 | 1.25 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BAAS-37-150 | BACH-37-150 | BACS-37-150 | 3/8 | .3735 | .3720 | 1.50 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BAAS-37-175 | BACH-37-175 | BACS-37-175 | 3/8 | .3735 | .3720 | 1.75 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BAAS-37-200 | BACH-37-200 | BACS-37-200 | 3/8 | .3735 | .3720 | 2.00 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BAAS-37-250 | BACH-37-250 | BACS-37-250 | 3/8 | .3735 | .3720 | 2.50 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BAAS-37-300 | BACH-37-300 | BACS-37-300 | 3/8 | .3735 | .3720 | 3.00 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BAAS-37-350 | BACH-37-350 | BACS-37-350 | 3/8 | .3735 | .3720 | 3.50 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BAAS-37-400 | BACH-37-400 | BACS-37-400 | 3/8 | .3735 | .3720 | 4.00 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BAAS-50-100 | BACH-50-100 | BACS-50-100 | 1/2 | .4985 | .4970 | 1.00 | .594 | .460 | 1.27 | .72 | .85 | .42 | 1.37 |
| BAAS-50-125 | BACH-50-125 | BACS-50-125 | 1/2 | .4985 | .4970 | 1.25 | .594 | .460 | 1.27 | .72 | .85 | .42 | 1.37 |
| BAAS-50-150 | BACH-50-150 | BACS-50-150 | 1/2 | .4985 | .4970 | 1.50 | .594 | .460 | 1.27 | .72 | .85 | .42 | 1.37 |
| BAAS-50-175 | BACH-50-175 | BACS-50-175 | 1/2 | .4985 | .4970 | 1.75 | .594 | .460 | 1.27 | .72 | .85 | .42 | 1.37 |
| BAAS-50-200 | BACH-50-200 | BACS-50-200 | 1/2 | .4985 | .4970 | 2.00 | .594 | .460 | 1.27 | .72 | .85 | .42 | 1.37 |
| BAAS-50-250 | BACH-50-250 | BACS-50-250 | 1/2 | .4985 | .4970 | 2.50 | .594 | .460 | 1.27 | .72 | .85 | .42 | 1.37 |
| BAAS-50-300 | BACH-50-300 | BACS-50-300 | 1/2 | .4985 | .4970 | 3.00 | .594 | .460 | 1.27 | .72 | .85 | .42 | 1.37 |
| BAAS-50-350 | BACH-50-350 | BACS-50-350 | 1/2 | .4985 | .4970 | 3.50 | .594 | .460 | 1.27 | .72 | .85 | .42 | 1.37 |
| BAAS-50-400 | BACH-50-400 | BACS-50-400 | 1/2 | .4985 | .4970 | 4.00 | .594 | .460 | 1.27 | .72 | .85 | .42 | 1.37 |
| BAAS-50-450 | BACH-50-450 | BACS-50-450 | 1/2 | .4985 | .4970 | 4.50 | .594 | .460 | 1.27 | .72 | .85 | .42 | 1.37 |
| BAAS-50-500 | BACH-50-500 | BACS-50-500 | 1/2 | .4985 | .4970 | 5.00 | .594 | .460 | 1.27 | .72 | .85 | .42 | 1.37 |
| BAAS-50-550 | BACH-50-550 | BACS-50-550 | 1/2 | .4985 | .4970 | 5.50 | .594 | .460 | 1.27 | .72 | .85 | .42 | 1.37 |
| BAAS-50-600 | BACH-50-600 | BACS-50-600 | 1/2 | .4985 | .4970 | 6.00 | .594 | .460 | 1.27 | .72 | .85 | .42 | 1.37 |
| BAAS-62-150 | BACH-62-150 | — | 5/8 | .6235 | .6220 | 1.50 | .750 | .580 | 1.65 | .94 | 1.10 | .54 | 1.75 |
| BAAS-62-175 | BACH-62-175 | — | 5/8 | .6235 | .6220 | 1.75 | .750 | .580 | 1.65 | .94 | 1.10 | .54 | 1.75 |
| BAAS-62-200 | BACH-62-200 | — | 5/8 | .6235 | .6220 | 2.00 | .750 | .580 | 1.65 | .94 | 1.10 | .54 | 1.75 |
| BAAS-62-250 | BACH-62-250 | — | 5/8 | .6235 | .6220 | 2.50 | .750 | .580 | 1.65 | .94 | 1.10 | .54 | 1.75 |
| BAAS-62-300 | BACH-62-300 | — | 5/8 | .6235 | .6220 | 3.00 | .750 | .580 | 1.65 | .94 | 1.10 | .54 | 1.75 |
| BAAS-62-350 | BACH-62-350 | — | 5/8 | .6235 | .6220 | 3.50 | .750 | .580 | 1.65 | .94 | 1.10 | .54 | 1.75 |
| BAAS-62-400 | BACH-62-400 | — | 5/8 | .6235 | .6220 | 4.00 | .750 | .580 | 1.65 | .94 | 1.10 | .54 | 1.75 |
| BAAS-62-450 | BACH-62-450 | — | 5/8 | .6235 | .6220 | 4.50 | .750 | .580 | 1.65 | .94 | 1.10 | .54 | 1.75 |
| BAAS-62-500 | BACH-62-500 | — | 5/8 | .6235 | .6220 | 5.00 | .750 | .580 | 1.65 | .94 | 1.10 | .54 | 1.75 |
| BAAS-62-550 | BACH-62-550 | — | 5/8 | .6235 | .6220 | 5.50 | .750 | .580 | 1.65 | .94 | 1.10 | .54 | 1.75 |
| BAAS-62-600 | BACH-62-600 | — | 5/8 | .6235 | .6220 | 6.00 | .750 | .580 | 1.65 | .94 | 1.10 | .54 | 1.75 |

Aluminum Button Handle | Metric

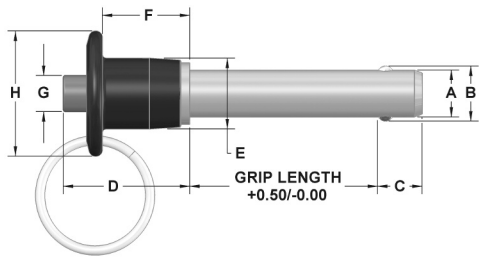


| Dia mm | Hole Size Max mm | Hole Size Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|--------|------------------|------------------|----------------------------|--------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. The shanks are made from 17-4PH stainless steel. The handles for the pins listed below are made from 2024-T4 aluminum and anodized black. Stainless handles are also available. The pins are supplied with a stainless steel split ring for attaching a cable assembly. Pins in other grip lengths are available as special orders. See page 2 for complete specifications. Compliant to RoHS requirements.

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | F mm | G mm | H mm |
|----------------|---------------------|----------|----------|----------------|--------------|-------------|------|------|------|------|------|
| MBACH-05-010 | 5 | 4.96 | 4.92 | 10 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-05-015 | 5 | 4.96 | 4.92 | 15 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-05-020 | 5 | 4.96 | 4.92 | 20 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-05-025 | 5 | 4.96 | 4.92 | 25 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-05-030 | 5 | 4.96 | 4.92 | 30 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-05-035 | 5 | 4.96 | 4.92 | 35 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-05-040 | 5 | 4.96 | 4.92 | 40 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-05-045 | 5 | 4.96 | 4.92 | 45 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-05-050 | 5 | 4.96 | 4.92 | 50 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-05-060 | 5 | 4.96 | 4.92 | 60 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-05-070 | 5 | 4.96 | 4.92 | 70 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-05-080 | 5 | 4.96 | 4.92 | 80 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-05-090 | 5 | 4.96 | 4.92 | 90 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-05-100 | 5 | 4.96 | 4.92 | 100 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-010 | 6 | 5.96 | 5.92 | 10 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-015 | 6 | 5.96 | 5.92 | 15 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-020 | 6 | 5.96 | 5.92 | 20 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-025 | 6 | 5.96 | 5.92 | 25 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-030 | 6 | 5.96 | 5.92 | 30 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-035 | 6 | 5.96 | 5.92 | 35 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-040 | 6 | 5.96 | 5.92 | 40 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-045 | 6 | 5.96 | 5.92 | 45 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-050 | 6 | 5.96 | 5.92 | 50 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-060 | 6 | 5.96 | 5.92 | 60 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-070 | 6 | 5.96 | 5.92 | 70 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-080 | 6 | 5.96 | 5.92 | 80 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-090 | 6 | 5.96 | 5.92 | 90 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-06-100 | 6 | 5.96 | 5.92 | 100 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-010 | 8 | 7.96 | 7.92 | 10 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-015 | 8 | 7.96 | 7.92 | 15 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-020 | 8 | 7.96 | 7.92 | 20 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-025 | 8 | 7.96 | 7.92 | 25 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-030 | 8 | 7.96 | 7.92 | 30 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-035 | 8 | 7.96 | 7.92 | 35 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-040 | 8 | 7.96 | 7.92 | 40 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-045 | 8 | 7.96 | 7.92 | 45 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-050 | 8 | 7.96 | 7.92 | 50 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-060 | 8 | 7.96 | 7.92 | 60 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-070 | 8 | 7.96 | 7.92 | 70 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-080 | 8 | 7.96 | 7.92 | 80 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-090 | 8 | 7.96 | 7.92 | 90 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBACH-08-100 | 8 | 7.96 | 7.92 | 100 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |

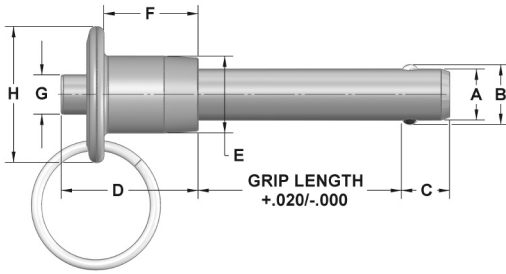
Aluminum Button Handle | Metric (continued)



| Dia mm | Hole Size Max mm | Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|-----------|------------------------|-----------|----------------------------------|--------------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | F mm | G mm | H mm |
|-------------------|---------------------------|----------------|----------------|----------------------|--------------------|-------------------|---------|---------|---------|---------|---------|
| MBACH-10-015 | 10 | 9.96 | 9.92 | 15 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBACH-10-020 | 10 | 9.96 | 9.92 | 20 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBACH-10-025 | 10 | 9.96 | 9.92 | 25 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBACH-10-030 | 10 | 9.96 | 9.92 | 30 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBACH-10-035 | 10 | 9.96 | 9.92 | 35 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBACH-10-040 | 10 | 9.96 | 9.92 | 40 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBACH-10-045 | 10 | 9.96 | 9.92 | 45 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBACH-10-050 | 10 | 9.96 | 9.92 | 50 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBACH-10-060 | 10 | 9.96 | 9.92 | 60 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBACH-10-070 | 10 | 9.96 | 9.92 | 70 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBACH-10-080 | 10 | 9.96 | 9.92 | 80 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBACH-10-090 | 10 | 9.96 | 9.92 | 90 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBACH-10-100 | 10 | 9.96 | 9.92 | 100 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBACH-12-020 | 12 | 11.96 | 11.92 | 20 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBACH-12-025 | 12 | 11.96 | 11.92 | 25 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBACH-12-030 | 12 | 11.96 | 11.92 | 30 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBACH-12-035 | 12 | 11.96 | 11.92 | 35 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBACH-12-040 | 12 | 11.96 | 11.92 | 40 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBACH-12-045 | 12 | 11.96 | 11.92 | 45 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBACH-12-050 | 12 | 11.96 | 11.92 | 50 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBACH-12-060 | 12 | 11.96 | 11.92 | 60 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBACH-12-070 | 12 | 11.96 | 11.92 | 70 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBACH-12-080 | 12 | 11.96 | 11.92 | 80 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBACH-12-090 | 12 | 11.96 | 11.92 | 90 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBACH-12-100 | 12 | 11.96 | 11.92 | 100 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBACH-16-025 | 16 | 15.96 | 15.92 | 25 | 19 | 14 | 41.9 | 23.9 | 27.9 | 13.7 | 44.5 |
| MBACH-16-030 | 16 | 15.96 | 15.92 | 30 | 19 | 14 | 41.9 | 23.9 | 27.9 | 13.7 | 44.5 |
| MBACH-16-035 | 16 | 15.96 | 15.92 | 35 | 19 | 14 | 41.9 | 23.9 | 27.9 | 13.7 | 44.5 |
| MBACH-16-040 | 16 | 15.96 | 15.92 | 40 | 19 | 14 | 41.9 | 23.9 | 27.9 | 13.7 | 44.5 |
| MBACH-16-045 | 16 | 15.96 | 15.92 | 45 | 19 | 14 | 41.9 | 23.9 | 27.9 | 13.7 | 44.5 |
| MBACH-16-050 | 16 | 15.96 | 15.92 | 50 | 19 | 14 | 41.9 | 23.9 | 27.9 | 13.7 | 44.5 |
| MBACH-16-060 | 16 | 15.96 | 15.92 | 60 | 19 | 14 | 41.9 | 23.9 | 27.9 | 13.7 | 44.5 |
| MBACH-16-070 | 16 | 15.96 | 15.92 | 70 | 19 | 14 | 41.9 | 23.9 | 27.9 | 13.7 | 44.5 |
| MBACH-16-080 | 16 | 15.96 | 15.92 | 80 | 19 | 14 | 41.9 | 23.9 | 27.9 | 13.7 | 44.5 |
| MBACH-16-090 | 16 | 15.96 | 15.92 | 90 | 19 | 14 | 41.9 | 23.9 | 27.9 | 13.7 | 44.5 |
| MBACH-16-100 | 16 | 15.96 | 15.92 | 100 | 19 | 14 | 41.9 | 23.9 | 27.9 | 13.7 | 44.5 |

Stainless Steel Button Handle | Inch



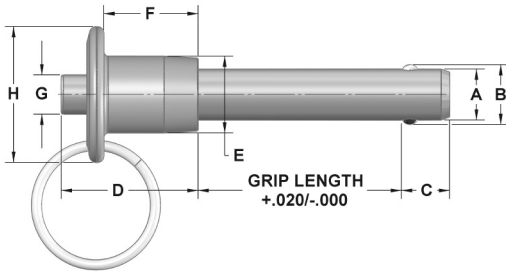
| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 3/16 | .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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. They are available in two types of stainless steel to meet your application. The handles and actuator buttons for the pins listed below are made from 303 stainless steel. The pins are supplied with a stainless steel split ring for attaching a cable assembly. Pins in other grip lengths are available as special orders. See page 2 for complete specifications.

| 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/-0.005 B | +0.000/-0.030 C | D | E | F | G | H |
|----------------|----------------------|------------------|-------|-------|-------------|------------|-----------------|-----|-----|-----|-----|-----|
| BCCH-18-050 | — | 3/16 | .1885 | .1870 | .50 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BCCH-18-075 | — | 3/16 | .1885 | .1870 | .75 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BCCH-18-100 | — | 3/16 | .1885 | .1870 | 1.00 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BCCH-18-125 | — | 3/16 | .1885 | .1870 | 1.25 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BCCH-18-150 | — | 3/16 | .1885 | .1870 | 1.50 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BCCH-18-175 | — | 3/16 | .1885 | .1870 | 1.75 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BCCH-18-200 | — | 3/16 | .1885 | .1870 | 2.00 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BCCH-18-250 | — | 3/16 | .1885 | .1870 | 2.50 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BCCH-18-300 | — | 3/16 | .1885 | .1870 | 3.00 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BCCH-18-350 | — | 3/16 | .1885 | .1870 | 3.50 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BCCH-18-400 | — | 3/16 | .1885 | .1870 | 4.00 | .220 | .260 | .92 | .47 | .63 | .23 | .81 |
| BCCH-25-050 | BCCS-25-050 | 1/4 | .2485 | .2470 | .50 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BCCH-25-075 | BCCS-25-075 | 1/4 | .2485 | .2470 | .75 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BCCH-25-100 | BCCS-25-100 | 1/4 | .2485 | .2470 | 1.00 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BCCH-25-125 | BCCS-25-125 | 1/4 | .2485 | .2470 | 1.25 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BCCH-25-150 | BCCS-25-150 | 1/4 | .2485 | .2470 | 1.50 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BCCH-25-175 | BCCS-25-175 | 1/4 | .2485 | .2470 | 1.75 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BCCH-25-200 | BCCS-25-200 | 1/4 | .2485 | .2470 | 2.00 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BCCH-25-250 | BCCS-25-250 | 1/4 | .2485 | .2470 | 2.50 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BCCH-25-300 | BCCS-25-300 | 1/4 | .2485 | .2470 | 3.00 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BCCH-25-350 | BCCS-25-350 | 1/4 | .2485 | .2470 | 3.50 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BCCH-25-400 | BCCS-25-400 | 1/4 | .2485 | .2470 | 4.00 | .289 | .290 | .92 | .47 | .63 | .23 | .81 |
| BCCH-31-050 | BCCS-31-050 | 5/16 | .3110 | .3095 | .50 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BCCH-31-075 | BCCS-31-075 | 5/16 | .3110 | .3095 | .75 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BCCH-31-100 | BCCS-31-100 | 5/16 | .3110 | .3095 | 1.00 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BCCH-31-125 | BCCS-31-125 | 5/16 | .3110 | .3095 | 1.25 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BCCH-31-150 | BCCS-31-150 | 5/16 | .3110 | .3095 | 1.50 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BCCH-31-200 | BCCS-31-200 | 5/16 | .3110 | .3095 | 1.75 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BCCH-31-200 | BCCS-31-200 | 5/16 | .3110 | .3095 | 2.00 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BCCH-31-250 | BCCS-31-250 | 5/16 | .3110 | .3095 | 2.50 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BCCH-31-300 | BCCS-31-300 | 5/16 | .3110 | .3095 | 3.00 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BCCH-31-350 | BCCS-31-350 | 5/16 | .3110 | .3095 | 3.50 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |
| BCCH-31-400 | BCCS-31-400 | 5/16 | .3110 | .3095 | 4.00 | .375 | .330 | .92 | .47 | .63 | .23 | .81 |

Stainless Steel Button Handle | Inch (continued)

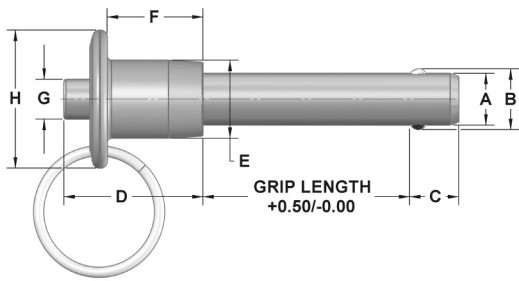


| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 3/16 | .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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

| 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/-0.005 B | +0.000/-0.030 C | D | E | F | G | H |
|----------------|----------------------|------------------|-------|-------|-------------|------------|-----------------|------|-----|-----|-----|------|
| BCCH-37-050 | BCCS-37-050 | 3/8 | .3735 | .3720 | .50 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BCCH-37-075 | BCCS-37-075 | 3/8 | .3735 | .3720 | .75 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BCCH-37-100 | BCCS-37-100 | 3/8 | .3735 | .3720 | 1.00 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BCCH-37-125 | BCCS-37-125 | 3/8 | .3735 | .3720 | 1.25 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BCCH-37-150 | BCCS-37-150 | 3/8 | .3735 | .3720 | 1.50 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BCCH-37-175 | BCCS-37-175 | 3/8 | .3735 | .3720 | 1.75 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BCCH-37-200 | BCCS-37-200 | 3/8 | .3735 | .3720 | 2.00 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BCCH-37-250 | BCCS-37-250 | 3/8 | .3735 | .3720 | 2.50 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BCCH-37-300 | BCCS-37-300 | 3/8 | .3735 | .3720 | 3.00 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BCCH-37-350 | BCCS-37-350 | 3/8 | .3735 | .3720 | 3.50 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BCCH-37-400 | BCCS-37-400 | 3/8 | .3735 | .3720 | 4.00 | .440 | .365 | 1.01 | .56 | .70 | .29 | 1.00 |
| BCCH-50-100 | BCCS-50-100 | 1/2 | .4985 | .4970 | 1.00 | .594 | .46 | 1.27 | .72 | .85 | .42 | 1.37 |
| BCCH-50-125 | BCCS-50-125 | 1/2 | .4985 | .4970 | 1.25 | .594 | .46 | 1.27 | .72 | .85 | .42 | 1.37 |
| BCCH-50-150 | BCCS-50-150 | 1/2 | .4985 | .4970 | 1.50 | .594 | .46 | 1.27 | .72 | .85 | .42 | 1.37 |
| BCCH-50-175 | BCCS-50-175 | 1/2 | .4985 | .4970 | 1.75 | .594 | .46 | 1.27 | .72 | .85 | .42 | 1.37 |
| BCCH-50-200 | BCCS-50-200 | 1/2 | .4985 | .4970 | 2.00 | .594 | .46 | 1.27 | .72 | .85 | .42 | 1.37 |
| BCCH-50-250 | BCCS-50-250 | 1/2 | .4985 | .4970 | 2.50 | .594 | .46 | 1.27 | .72 | .85 | .42 | 1.37 |
| BCCH-50-300 | BCCS-50-300 | 1/2 | .4985 | .4970 | 3.00 | .594 | .46 | 1.27 | .72 | .85 | .42 | 1.37 |
| BCCH-50-350 | BCCS-50-350 | 1/2 | .4985 | .4970 | 3.50 | .594 | .46 | 1.27 | .72 | .85 | .42 | 1.37 |
| BCCH-50-400 | BCCS-50-400 | 1/2 | .4985 | .4970 | 4.00 | .594 | .46 | 1.27 | .72 | .85 | .42 | 1.37 |
| BCCH-50-450 | BCCS-50-450 | 1/2 | .4985 | .4970 | 4.50 | .594 | .46 | 1.27 | .72 | .85 | .42 | 1.37 |
| BCCH-50-500 | BCCS-50-500 | 1/2 | .4985 | .4970 | 5.00 | .594 | .46 | 1.27 | .72 | .85 | .42 | 1.37 |
| BCCH-50-550 | BCCS-50-550 | 1/2 | .4985 | .4970 | 5.50 | .594 | .46 | 1.27 | .72 | .85 | .42 | 1.37 |
| BCCH-50-600 | BCCS-50-600 | 1/2 | .4985 | .4970 | 6.00 | .594 | .46 | 1.27 | .72 | .85 | .42 | 1.37 |

Stainless Steel Button Handle | Metric

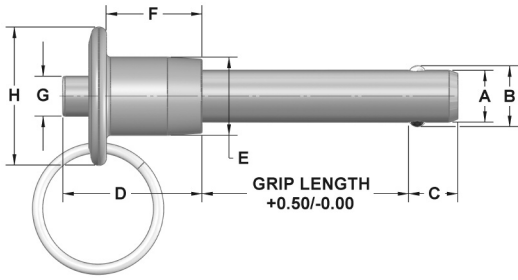


| Dia mm | Hole Size Max mm | Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|-----------|------------------------|-----------|----------------------------------|--------------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. The handles for the pins listed below are made from 303 stainless steel. The shanks are made from 17-4PH stainless steel. The pins are supplied with a stainless steel split ring for attaching a cable assembly. Pins in other grip lengths are available as special orders. See page 2 for complete specifications. Compliant to RoHS requirements.

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | F mm | G mm | H mm |
|-------------------|---------------------------|----------------|----------------|----------------------|--------------------|-------------------|---------|---------|---------|---------|---------|
| MBCCH-05-010 | 5 | 4.96 | 4.92 | 10 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-05-015 | 5 | 4.96 | 4.92 | 15 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-05-020 | 5 | 4.96 | 4.92 | 20 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-05-025 | 5 | 4.96 | 4.92 | 25 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-05-030 | 5 | 4.96 | 4.92 | 30 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-05-035 | 5 | 4.96 | 4.92 | 35 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-05-040 | 5 | 4.96 | 4.92 | 40 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-05-045 | 5 | 4.96 | 4.92 | 45 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-05-050 | 5 | 4.96 | 4.92 | 50 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-05-060 | 5 | 4.96 | 4.92 | 60 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-05-070 | 5 | 4.96 | 4.92 | 70 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-05-080 | 5 | 4.96 | 4.92 | 80 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-05-090 | 5 | 4.96 | 4.92 | 90 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-05-100 | 5 | 4.96 | 4.92 | 100 | 5.54 | 6 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-010 | 6 | 5.96 | 5.92 | 10 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-015 | 6 | 5.96 | 5.92 | 15 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-020 | 6 | 5.96 | 5.92 | 20 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-025 | 6 | 5.96 | 5.92 | 25 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-030 | 6 | 5.96 | 5.92 | 30 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-035 | 6 | 5.96 | 5.92 | 35 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-040 | 6 | 5.96 | 5.92 | 40 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-045 | 6 | 5.96 | 5.92 | 45 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-050 | 6 | 5.96 | 5.92 | 50 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-060 | 6 | 5.96 | 5.92 | 60 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-070 | 6 | 5.96 | 5.92 | 70 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-080 | 6 | 5.96 | 5.92 | 80 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-090 | 6 | 5.96 | 5.92 | 90 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-06-100 | 6 | 5.96 | 5.92 | 100 | 6.99 | 7 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-010 | 8 | 7.96 | 7.92 | 10 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-015 | 8 | 7.96 | 7.92 | 15 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-020 | 8 | 7.96 | 7.92 | 20 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-025 | 8 | 7.96 | 7.92 | 25 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-030 | 8 | 7.96 | 7.92 | 30 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-035 | 8 | 7.96 | 7.92 | 35 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-040 | 8 | 7.96 | 7.92 | 40 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-045 | 8 | 7.96 | 7.92 | 45 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-050 | 8 | 7.96 | 7.92 | 50 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-060 | 8 | 7.96 | 7.92 | 60 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-070 | 8 | 7.96 | 7.92 | 70 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-080 | 8 | 7.96 | 7.92 | 80 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-090 | 8 | 7.96 | 7.92 | 90 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |
| MBCCH-08-100 | 8 | 7.96 | 7.92 | 100 | 9.42 | 8 | 23.4 | 11.9 | 16 | 5.8 | 20.6 |

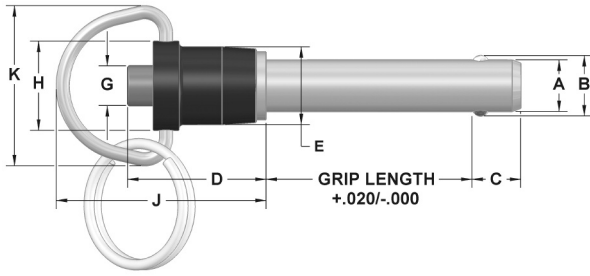
Stainless Steel Button Handle | Metric (continued)



| Dia mm | Hole Size Max mm | Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|-----------|------------------------|-----------|----------------------------------|--------------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | F mm | G mm | H mm |
|-------------------|---------------------------|----------------|----------------|----------------------|--------------------|-------------------|---------|---------|---------|---------|---------|
| MBCCH-10-015 | 10 | 9.96 | 9.92 | 15 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBCCH-10-020 | 10 | 9.96 | 9.92 | 20 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBCCH-10-025 | 10 | 9.96 | 9.92 | 25 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBCCH-10-030 | 10 | 9.96 | 9.92 | 30 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBCCH-10-035 | 10 | 9.96 | 9.92 | 35 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBCCH-10-040 | 10 | 9.96 | 9.92 | 40 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBCCH-10-045 | 10 | 9.96 | 9.92 | 45 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBCCH-10-050 | 10 | 9.96 | 9.92 | 50 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBCCH-10-060 | 10 | 9.96 | 9.92 | 60 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBCCH-10-070 | 10 | 9.96 | 9.92 | 70 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBCCH-10-080 | 10 | 9.96 | 9.92 | 80 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBCCH-10-090 | 10 | 9.96 | 9.92 | 90 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBCCH-10-100 | 10 | 9.96 | 9.92 | 100 | 11.86 | 9 | 25.7 | 14.2 | 17.8 | 7.4 | 25.4 |
| MBCCH-12-020 | 12 | 11.96 | 11.92 | 20 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBCCH-12-025 | 12 | 11.96 | 11.92 | 25 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBCCH-12-030 | 12 | 11.96 | 11.92 | 30 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBCCH-12-035 | 12 | 11.96 | 11.92 | 35 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBCCH-12-040 | 12 | 11.96 | 11.92 | 40 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBCCH-12-045 | 12 | 11.96 | 11.92 | 45 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBCCH-12-050 | 12 | 11.96 | 11.92 | 50 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBCCH-12-060 | 12 | 11.96 | 11.92 | 60 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBCCH-12-070 | 12 | 11.96 | 11.92 | 70 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBCCH-12-080 | 12 | 11.96 | 11.92 | 80 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBCCH-12-090 | 12 | 11.96 | 11.92 | 90 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |
| MBCCH-12-100 | 12 | 11.96 | 11.92 | 100 | 14.45 | 10 | 32.3 | 18.3 | 21.6 | 10.7 | 34.7 |

Aluminum Ring Handle | Inch



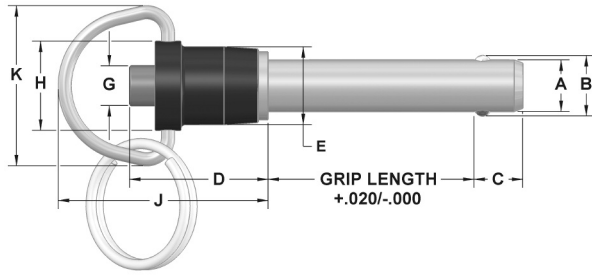
| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 3/16 | .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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. They are available in three shank materials to meet your application. The handles for the pins listed below are made from 2024-T4 aluminum and anodized black. Stainless handles are also available. The pins are supplied with a stainless steel split ring for attaching a cable assembly. Pins in other grip lengths are available as special orders. See page 2 for complete specifications.

| 4130 Steel Part # | 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/- .005 B | + .000/- .030 C | D | E | G | H | J | K |
|-------------------|----------------|----------------------|------------------|-------|-------|-------------|------------|-----------------|-----|-----|-----|-----|------|------|
| RAAS-18-050 | RACH-18-050 | — | 3/16 | .1885 | .1870 | .50 | .220 | .260 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-18-075 | RACH-18-075 | — | 3/16 | .1885 | .1870 | .75 | .220 | .260 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-18-100 | RACH-18-100 | — | 3/16 | .1885 | .1870 | 1.00 | .220 | .260 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-18-125 | RACH-18-125 | — | 3/16 | .1885 | .1870 | 1.25 | .220 | .260 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-18-150 | RACH-18-150 | — | 3/16 | .1885 | .1870 | 1.50 | .220 | .260 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-18-175 | RACH-18-175 | — | 3/16 | .1885 | .1870 | 1.75 | .220 | .260 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-18-200 | RACH-18-200 | — | 3/16 | .1885 | .1870 | 2.00 | .220 | .260 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-18-250 | RACH-18-250 | — | 3/16 | .1885 | .1870 | 2.50 | .220 | .260 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-18-300 | RACH-18-300 | — | 3/16 | .1885 | .1870 | 3.00 | .220 | .260 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-18-350 | RACH-18-350 | — | 3/16 | .1885 | .1870 | 3.50 | .220 | .260 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-18-400 | RACH-18-400 | — | 3/16 | .1885 | .1870 | 4.00 | .220 | .260 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-25-050 | RACH-25-050 | RACS-25-050 | 1/4 | .2485 | .2470 | .50 | .289 | .290 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-25-075 | RACH-25-075 | RACS-25-075 | 1/4 | .2485 | .2470 | .75 | .289 | .290 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-25-100 | RACH-25-100 | RACS-25-100 | 1/4 | .2485 | .2470 | 1.00 | .289 | .290 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-25-125 | RACH-25-125 | RACS-25-125 | 1/4 | .2485 | .2470 | 1.25 | .289 | .290 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-25-150 | RACH-25-150 | RACS-25-150 | 1/4 | .2485 | .2470 | 1.50 | .289 | .290 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-25-175 | RACH-25-175 | RACS-25-175 | 1/4 | .2485 | .2470 | 1.75 | .289 | .290 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-25-200 | RACH-25-200 | RACS-25-200 | 1/4 | .2485 | .2470 | 2.00 | .289 | .290 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-25-250 | RACH-25-250 | RACS-25-250 | 1/4 | .2485 | .2470 | 2.50 | .289 | .290 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-25-300 | RACH-25-300 | RACS-25-300 | 1/4 | .2485 | .2470 | 3.00 | .289 | .290 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-25-350 | RACH-25-350 | RACS-25-350 | 1/4 | .2485 | .2470 | 3.50 | .289 | .290 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-25-400 | RACH-25-400 | RACS-25-400 | 1/4 | .2485 | .2470 | 4.00 | .289 | .290 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-31-050 | RACH-31-050 | RACS-31-050 | 5/16 | .3110 | .3095 | .50 | .375 | .330 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-31-075 | RACH-31-075 | RACS-31-075 | 5/16 | .3110 | .3095 | .75 | .375 | .330 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-31-100 | RACH-31-100 | RACS-31-100 | 5/16 | .3110 | .3095 | 1.00 | .375 | .330 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-31-125 | RACH-31-125 | RACS-31-125 | 5/16 | .3110 | .3095 | 1.25 | .375 | .330 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-31-150 | RACH-31-150 | RACS-31-150 | 5/16 | .3110 | .3095 | 1.50 | .375 | .330 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-31-175 | RACH-31-175 | RACS-31-175 | 5/16 | .3110 | .3095 | 1.75 | .375 | .330 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-31-200 | RACH-31-200 | RACS-31-200 | 5/16 | .3110 | .3095 | 2.00 | .375 | .330 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-31-250 | RACH-31-250 | RACS-31-250 | 5/16 | .3110 | .3095 | 2.50 | .375 | .330 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-31-300 | RACH-31-300 | RACS-31-300 | 5/16 | .3110 | .3095 | 3.00 | .375 | .330 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-31-350 | RACH-31-350 | RACS-31-350 | 5/16 | .3110 | .3095 | 3.50 | .375 | .330 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RAAS-31-400 | RACH-31-400 | RACS-31-400 | 5/16 | .3110 | .3095 | 4.00 | .375 | .330 | .92 | .47 | .23 | .59 | 1.45 | 1.16 |

Aluminum Ring Handle | Inch (continued)

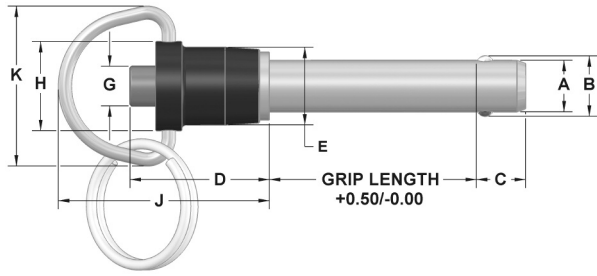


| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 3/16 | .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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

| 4130 Steel Part # | 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/- .005 B | + .000/- .030 C | D | E | G | H | J | K |
|-------------------|----------------|----------------------|------------------|-------|-------|-------------|------------|-----------------|------|-----|-----|------|------|------|
| RAAS-37-050 | RACH-37-050 | RACS-37-050 | 3/8 | .3735 | .3720 | .50 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RAAS-37-075 | RACH-37-075 | RACS-37-075 | 3/8 | .3735 | .3720 | .75 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RAAS-37-100 | RACH-37-100 | RACS-37-100 | 3/8 | .3735 | .3720 | 1.00 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RAAS-37-125 | RACH-37-125 | RACS-37-125 | 3/8 | .3735 | .3720 | 1.25 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RAAS-37-150 | RACH-37-150 | RACS-37-150 | 3/8 | .3735 | .3720 | 1.50 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RAAS-37-175 | RACH-37-175 | RACS-37-175 | 3/8 | .3735 | .3720 | 1.75 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RAAS-37-200 | RACH-37-200 | RACS-37-200 | 3/8 | .3735 | .3720 | 2.00 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RAAS-37-250 | RACH-37-250 | RACS-37-250 | 3/8 | .3735 | .3720 | 2.50 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RAAS-37-300 | RACH-37-300 | RACS-37-300 | 3/8 | .3735 | .3720 | 3.00 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RAAS-37-350 | RACH-37-350 | RACS-37-350 | 3/8 | .3735 | .3720 | 3.50 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RAAS-37-400 | RACH-37-400 | RACS-37-400 | 3/8 | .3735 | .3720 | 4.00 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RAAS-50-100 | RACH-50-100 | RACS-50-100 | 1/2 | .4985 | .4970 | 1.00 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RAAS-50-125 | RACH-50-125 | RACS-50-125 | 1/2 | .4985 | .4970 | 1.25 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RAAS-50-150 | RACH-50-150 | RACS-50-150 | 1/2 | .4985 | .4970 | 1.50 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RAAS-50-175 | RACH-50-175 | RACS-50-175 | 1/2 | .4985 | .4970 | 1.75 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RAAS-50-200 | RACH-50-200 | RACS-50-200 | 1/2 | .4985 | .4970 | 2.00 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RAAS-50-250 | RACH-50-250 | RACS-50-250 | 1/2 | .4985 | .4970 | 2.50 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RAAS-50-300 | RACH-50-300 | RACS-50-300 | 1/2 | .4985 | .4970 | 3.00 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RAAS-50-350 | RACH-50-350 | RACS-50-350 | 1/2 | .4985 | .4970 | 3.50 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RAAS-50-400 | RACH-50-400 | RACS-50-400 | 1/2 | .4985 | .4970 | 4.00 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RAAS-50-450 | RACH-50-450 | RACS-50-450 | 1/2 | .4985 | .4970 | 4.50 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RAAS-50-500 | RACH-50-500 | RACS-50-500 | 1/2 | .4985 | .4970 | 5.00 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RAAS-50-550 | RACH-50-550 | RACS-50-550 | 1/2 | .4985 | .4970 | 5.50 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RAAS-50-600 | RACH-50-600 | RACS-50-600 | 1/2 | .4985 | .4970 | 6.00 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RAAS-62-150 | RACH-62-150 | — | 5/8 | .6235 | .6220 | 1.50 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RAAS-62-175 | RACH-62-175 | — | 5/8 | .6235 | .6220 | 1.75 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RAAS-62-200 | RACH-62-200 | — | 5/8 | .6235 | .6220 | 2.00 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RAAS-62-250 | RACH-62-250 | — | 5/8 | .6235 | .6220 | 2.50 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RAAS-62-300 | RACH-62-300 | — | 5/8 | .6235 | .6220 | 3.00 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RAAS-62-350 | RACH-62-350 | — | 5/8 | .6235 | .6220 | 3.50 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RAAS-62-400 | RACH-62-400 | — | 5/8 | .6235 | .6220 | 4.00 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RAAS-62-450 | RACH-62-450 | — | 5/8 | .6235 | .6220 | 4.50 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RAAS-62-500 | RACH-62-500 | — | 5/8 | .6235 | .6220 | 5.00 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RAAS-62-550 | RACH-62-550 | — | 5/8 | .6235 | .6220 | 5.50 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RAAS-62-600 | RACH-62-600 | — | 5/8 | .6235 | .6220 | 6.00 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |

Aluminum Ring Handle | Metric

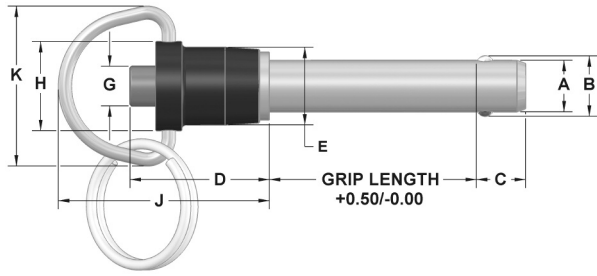


| Dia mm | Hole Size Max mm | Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|--------|------------------|--------|----------------------------|--------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. The shanks are made from 17-4PH stainless steel. The handles for the pins listed below are made from 2024-T4 aluminum and anodized black. Stainless handles are also available. The pins are supplied with a stainless steel split ring for attaching a cable assembly. Pins in other grip lengths are available as special orders. See page 2 for complete specifications. Compliant to RoHS requirements.

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | G mm | H mm | J mm | K mm |
|----------------|---------------------|----------|----------|----------------|--------------|-------------|------|------|------|------|------|------|
| MRACH-05-010 | 5 | 4.96 | 4.92 | 10 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-05-015 | 5 | 4.96 | 4.92 | 15 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-05-020 | 5 | 4.96 | 4.92 | 20 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-05-025 | 5 | 4.96 | 4.92 | 25 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-05-030 | 5 | 4.96 | 4.92 | 30 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-05-035 | 5 | 4.96 | 4.92 | 35 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-05-040 | 5 | 4.96 | 4.92 | 40 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-05-045 | 5 | 4.96 | 4.92 | 45 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-05-050 | 5 | 4.96 | 4.92 | 50 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-05-060 | 5 | 4.96 | 4.92 | 60 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-05-070 | 5 | 4.96 | 4.92 | 70 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-05-080 | 5 | 4.96 | 4.92 | 80 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-05-090 | 5 | 4.96 | 4.92 | 90 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-05-100 | 5 | 4.96 | 4.92 | 100 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-010 | 6 | 5.96 | 5.92 | 10 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-015 | 6 | 5.96 | 5.92 | 15 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-020 | 6 | 5.96 | 5.92 | 20 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-025 | 6 | 5.96 | 5.92 | 25 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-030 | 6 | 5.96 | 5.92 | 30 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-035 | 6 | 5.96 | 5.92 | 35 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-040 | 6 | 5.96 | 5.92 | 40 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-045 | 6 | 5.96 | 5.92 | 45 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-050 | 6 | 5.96 | 5.92 | 50 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-060 | 6 | 5.96 | 5.92 | 60 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-070 | 6 | 5.96 | 5.92 | 70 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-080 | 6 | 5.96 | 5.92 | 80 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-090 | 6 | 5.96 | 5.92 | 90 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-06-100 | 6 | 5.96 | 5.92 | 100 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-010 | 8 | 7.96 | 7.92 | 10 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-015 | 8 | 7.96 | 7.92 | 15 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-020 | 8 | 7.96 | 7.92 | 20 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-025 | 8 | 7.96 | 7.92 | 25 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-030 | 8 | 7.96 | 7.92 | 30 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-035 | 8 | 7.96 | 7.92 | 35 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-040 | 8 | 7.96 | 7.92 | 40 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-045 | 8 | 7.96 | 7.92 | 45 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-050 | 8 | 7.96 | 7.92 | 50 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-060 | 8 | 7.96 | 7.92 | 60 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-070 | 8 | 7.96 | 7.92 | 70 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-080 | 8 | 7.96 | 7.92 | 80 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-090 | 8 | 7.96 | 7.92 | 90 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRACH-08-100 | 8 | 7.96 | 7.92 | 100 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |

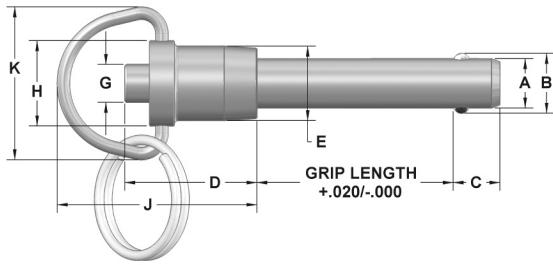
Aluminum Ring Handle | Metric (continued)



| Dia mm | Hole Size Max mm | Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|-----------|------------------------|-----------|----------------------------------|--------------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | G mm | H mm | J mm | K mm |
|-------------------|---------------------------|----------------|----------------|----------------------|--------------------|-------------------|---------|---------|---------|---------|---------|---------|
| MRACH-10-015 | 10 | 9.96 | 9.92 | 15 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRACH-10-020 | 10 | 9.96 | 9.92 | 20 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRACH-10-025 | 10 | 9.96 | 9.92 | 25 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRACH-10-030 | 10 | 9.96 | 9.92 | 30 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRACH-10-035 | 10 | 9.96 | 9.92 | 35 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRACH-10-040 | 10 | 9.96 | 9.92 | 40 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRACH-10-045 | 10 | 9.96 | 9.92 | 45 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRACH-10-050 | 10 | 9.96 | 9.92 | 50 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRACH-10-060 | 10 | 9.96 | 9.92 | 60 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRACH-10-070 | 10 | 9.96 | 9.92 | 70 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRACH-10-080 | 10 | 9.96 | 9.92 | 80 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRACH-10-090 | 10 | 9.96 | 9.92 | 90 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRACH-10-100 | 10 | 9.96 | 9.92 | 100 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRACH-12-020 | 12 | 11.96 | 11.92 | 20 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRACH-12-025 | 12 | 11.96 | 11.92 | 25 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRACH-12-030 | 12 | 11.96 | 11.92 | 30 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRACH-12-035 | 12 | 11.96 | 11.92 | 35 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRACH-12-040 | 12 | 11.96 | 11.92 | 40 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRACH-12-045 | 12 | 11.96 | 11.92 | 45 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRACH-12-050 | 12 | 11.96 | 11.92 | 50 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRACH-12-060 | 12 | 11.96 | 11.92 | 60 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRACH-12-070 | 12 | 11.96 | 11.92 | 70 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRACH-12-080 | 12 | 11.96 | 11.92 | 80 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRACH-12-090 | 12 | 11.96 | 11.92 | 90 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRACH-12-100 | 12 | 11.96 | 11.92 | 100 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRACH-16-025 | 16 | 15.96 | 15.92 | 25 | 19.00 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRACH-16-030 | 16 | 15.96 | 15.92 | 30 | 19.00 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRACH-16-035 | 16 | 15.96 | 15.92 | 35 | 19.00 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRACH-16-040 | 16 | 15.96 | 15.92 | 40 | 19.00 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRACH-16-045 | 16 | 15.96 | 15.92 | 45 | 19.00 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRACH-16-050 | 16 | 15.96 | 15.92 | 50 | 19.00 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRACH-16-060 | 16 | 15.96 | 15.92 | 60 | 19.00 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRACH-16-070 | 16 | 15.96 | 15.92 | 70 | 19.00 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRACH-16-080 | 16 | 15.96 | 15.92 | 80 | 19.00 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRACH-16-090 | 16 | 15.96 | 15.92 | 90 | 19.00 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRACH-16-100 | 16 | 15.96 | 15.92 | 100 | 19.00 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |

Stainless Steel Ring Handle | Inch



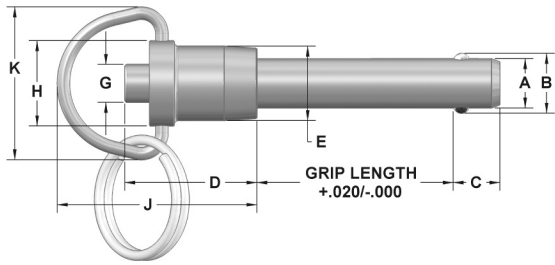
| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 3/16 | .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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. They are available in two types of stainless steel to meet your application. The handles and actuator buttons for the pins listed below are made from 303 stainless steel. The pins are supplied with a stainless steel split ring for attaching a cable assembly. Pins in other grip lengths are available as special orders. See page 2 for complete specifications.

| 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/- .005 B | + .000/- .030 C | D | E | G | H | J | K |
|----------------|----------------------|------------------|-------|-------|-------------|------------|-----------------|----|-----|-----|-----|------|------|
| RCCH-18-050 | — | 3/16 | .1885 | .1870 | .50 | .220 | .260 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-18-075 | — | 3/16 | .1885 | .1870 | .75 | .220 | .260 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-18-100 | — | 3/16 | .1885 | .1870 | 1.00 | .220 | .260 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-18-125 | — | 3/16 | .1885 | .1870 | 1.25 | .220 | .260 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-18-150 | — | 3/16 | .1885 | .1870 | 1.50 | .220 | .260 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-18-175 | — | 3/16 | .1885 | .1870 | 1.75 | .220 | .260 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-18-200 | — | 3/16 | .1885 | .1870 | 2.00 | .220 | .260 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-18-250 | — | 3/16 | .1885 | .1870 | 2.50 | .220 | .260 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-18-300 | — | 3/16 | .1885 | .1870 | 3.00 | .220 | .260 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-18-350 | — | 3/16 | .1885 | .1870 | 3.50 | .220 | .260 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-18-400 | — | 3/16 | .1885 | .1870 | 4.00 | .220 | .260 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-25-050 | RCCS-25-050 | 1/4 | .2485 | .2470 | .50 | .289 | .290 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-25-075 | RCCS-25-075 | 1/4 | .2485 | .2470 | .75 | .289 | .290 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-25-100 | RCCS-25-100 | 1/4 | .2485 | .2470 | 1.00 | .289 | .290 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-25-125 | RCCS-25-125 | 1/4 | .2485 | .2470 | 1.25 | .289 | .290 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-25-150 | RCCS-25-150 | 1/4 | .2485 | .2470 | 1.50 | .289 | .290 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-25-175 | RCCS-25-175 | 1/4 | .2485 | .2470 | 1.75 | .289 | .290 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-25-200 | RCCS-25-200 | 1/4 | .2485 | .2470 | 2.00 | .289 | .290 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-25-250 | RCCS-25-250 | 1/4 | .2485 | .2470 | 2.50 | .289 | .290 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-25-300 | RCCS-25-300 | 1/4 | .2485 | .2470 | 3.00 | .289 | .290 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-25-350 | RCCS-25-350 | 1/4 | .2485 | .2470 | 3.50 | .289 | .290 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-25-400 | RCCS-25-400 | 1/4 | .2485 | .2470 | 4.00 | .289 | .290 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-31-050 | RCCS-31-050 | 5/16 | .3110 | .3095 | .50 | .375 | .330 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-31-075 | RCCS-31-075 | 5/16 | .3110 | .3095 | .75 | .375 | .330 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-31-100 | RCCS-31-100 | 5/16 | .3110 | .3095 | 1.00 | .375 | .330 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-31-125 | RCCS-31-125 | 5/16 | .3110 | .3095 | 1.25 | .375 | .330 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-31-150 | RCCS-31-150 | 5/16 | .3110 | .3095 | 1.50 | .375 | .330 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-31-175 | RCCS-31-175 | 5/16 | .3110 | .3095 | 1.75 | .375 | .330 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-31-200 | RCCS-31-200 | 5/16 | .3110 | .3095 | 2.00 | .375 | .330 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-31-250 | RCCS-31-250 | 5/16 | .3110 | .3095 | 2.50 | .375 | .330 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-31-300 | RCCS-31-300 | 5/16 | .3110 | .3095 | 3.00 | .375 | .330 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-31-350 | RCCS-31-350 | 5/16 | .3110 | .3095 | 3.50 | .375 | .330 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |
| RCCH-31-400 | RCCS-31-400 | 5/16 | .3110 | .3095 | 4.00 | .375 | .330 | 92 | .47 | .23 | .59 | 1.45 | 1.16 |

Stainless Steel Ring Handle | Inch (continue)

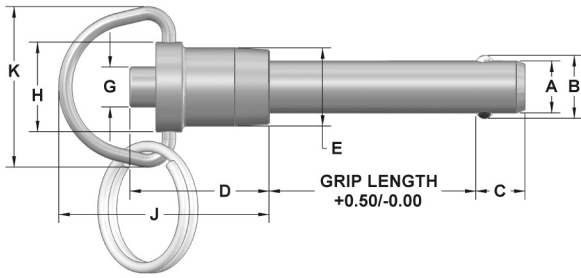


| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 3/16 | .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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

| 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/- .005 B | + .000/- .030 C | D | E | G | H | J | K |
|----------------|----------------------|------------------|-------|-------|-------------|------------|-----------------|------|-----|-----|------|------|------|
| RCCH-37-050 | RCCS-37-050 | 3/8 | .3735 | .3720 | .50 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RCCH-37-075 | RCCS-37-075 | 3/8 | .3735 | .3720 | .75 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RCCH-37-100 | RCCS-37-100 | 3/8 | .3735 | .3720 | 1.00 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RCCH-37-125 | RCCS-37-125 | 3/8 | .3735 | .3720 | 1.25 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RCCH-37-150 | RCCS-37-150 | 3/8 | .3735 | .3720 | 1.50 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RCCH-37-175 | RCCS-37-175 | 3/8 | .3735 | .3720 | 1.75 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RCCH-37-200 | RCCS-37-200 | 3/8 | .3735 | .3720 | 2.00 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RCCH-37-250 | RCCS-37-250 | 3/8 | .3735 | .3720 | 2.50 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RCCH-37-300 | RCCS-37-300 | 3/8 | .3735 | .3720 | 3.00 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RCCH-37-350 | RCCS-37-350 | 3/8 | .3735 | .3720 | 3.50 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RCCH-37-400 | RCCS-37-400 | 3/8 | .3735 | .3720 | 4.00 | .440 | .365 | 1.01 | .56 | .29 | .65 | 1.52 | 1.16 |
| RCCH-50-100 | RCCS-50-100 | 1/2 | .4985 | .4970 | 1.00 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RCCH-50-125 | RCCS-50-125 | 1/2 | .4985 | .4970 | 1.25 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RCCH-50-150 | RCCS-50-150 | 1/2 | .4985 | .4970 | 1.50 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RCCH-50-175 | RCCS-50-175 | 1/2 | .4985 | .4970 | 1.75 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RCCH-50-200 | RCCS-50-200 | 1/2 | .4985 | .4970 | 2.00 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RCCH-50-250 | RCCS-50-250 | 1/2 | .4985 | .4970 | 2.50 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RCCH-50-300 | RCCS-50-300 | 1/2 | .4985 | .4970 | 3.00 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RCCH-50-350 | RCCS-50-350 | 1/2 | .4985 | .4970 | 3.50 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RCCH-50-400 | RCCS-50-400 | 1/2 | .4985 | .4970 | 4.00 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RCCH-50-450 | RCCS-50-450 | 1/2 | .4985 | .4970 | 4.50 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RCCH-50-500 | RCCS-50-500 | 1/2 | .4985 | .4970 | 5.00 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RCCH-50-550 | RCCS-50-550 | 1/2 | .4985 | .4970 | 5.50 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RCCH-50-600 | RCCS-50-600 | 1/2 | .4985 | .4970 | 6.00 | .594 | .460 | 1.27 | .72 | .42 | .81 | 1.88 | 1.43 |
| RCCH-62-150 | — | 5/8 | .6235 | .6220 | 1.50 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RCCH-62-175 | — | 5/8 | .6235 | .6220 | 1.75 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RCCH-62-200 | — | 5/8 | .6235 | .6220 | 2.00 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RCCH-62-250 | — | 5/8 | .6235 | .6220 | 2.50 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RCCH-62-300 | — | 5/8 | .6235 | .6220 | 3.00 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RCCH-62-350 | — | 5/8 | .6235 | .6220 | 3.50 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RCCH-62-400 | — | 5/8 | .6235 | .6220 | 4.00 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RCCH-62-450 | — | 5/8 | .6235 | .6220 | 4.50 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RCCH-62-500 | — | 5/8 | .6235 | .6220 | 5.00 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RCCH-62-550 | — | 5/8 | .6235 | .6220 | 5.50 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |
| RCCH-62-600 | — | 5/8 | .6235 | .6220 | 6.00 | .750 | .580 | 1.65 | .94 | .54 | 1.06 | 2.57 | 1.72 |

Stainless Steel Ring Handle | Metric

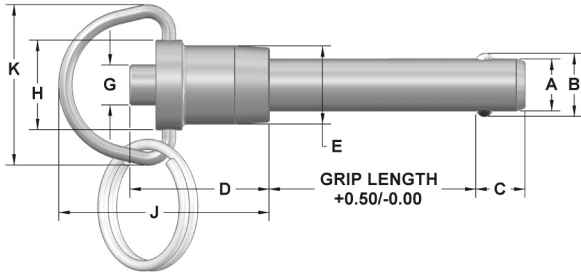


| Dia mm | Hole Size Max mm | Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|-----------|------------------------|-----------|----------------------------------|--------------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. The handles for the pins listed below are made from 303 stainless steel. The shanks are made from 17-4PH stainless steel. The pins are supplied with a stainless steel split ring for attaching a cable assembly. Pins in other grip lengths are available as special orders. See page 2 for complete specifications. Compliant to RoHS requirements.

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | G mm | H mm | J mm | K mm |
|-------------------|---------------------------|----------------|----------------|----------------------|--------------------|-------------------|---------|---------|---------|---------|---------|---------|
| MRCCH-05-010 | 5 | 4.96 | 4.92 | 10 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-05-015 | 5 | 4.96 | 4.92 | 15 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-05-020 | 5 | 4.96 | 4.92 | 20 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-05-025 | 5 | 4.96 | 4.92 | 25 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-05-300 | 5 | 4.96 | 4.92 | 30 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-05-035 | 5 | 4.96 | 4.92 | 35 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-05-040 | 5 | 4.96 | 4.92 | 40 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-05-045 | 5 | 4.96 | 4.92 | 45 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-05-050 | 5 | 4.96 | 4.92 | 50 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-05-060 | 5 | 4.96 | 4.92 | 60 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-05-070 | 5 | 4.96 | 4.92 | 70 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-05-080 | 5 | 4.96 | 4.92 | 80 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-05-090 | 5 | 4.96 | 4.92 | 90 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-05-100 | 5 | 4.96 | 4.92 | 100 | 5.54 | 6 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-010 | 6 | 5.96 | 5.92 | 10 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-015 | 6 | 5.96 | 5.92 | 15 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-020 | 6 | 5.96 | 5.92 | 20 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-025 | 6 | 5.96 | 5.92 | 25 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-030 | 6 | 5.96 | 5.92 | 30 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-035 | 6 | 5.96 | 5.92 | 35 | 6.99 | 7 | 23.1 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-040 | 6 | 5.96 | 5.92 | 40 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-045 | 6 | 5.96 | 5.92 | 45 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-050 | 6 | 5.96 | 5.92 | 50 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-060 | 6 | 5.96 | 5.92 | 60 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-070 | 6 | 5.96 | 5.92 | 70 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-080 | 6 | 5.96 | 5.92 | 80 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-090 | 6 | 5.96 | 5.92 | 90 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-06-100 | 6 | 5.96 | 5.92 | 100 | 6.99 | 7 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-010 | 8 | 7.96 | 7.92 | 10 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-015 | 8 | 7.96 | 7.92 | 15 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-020 | 8 | 7.96 | 7.92 | 20 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-025 | 8 | 7.96 | 7.92 | 25 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-030 | 8 | 7.96 | 7.92 | 30 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-035 | 8 | 7.96 | 7.92 | 35 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-040 | 8 | 7.96 | 7.92 | 40 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-045 | 8 | 7.96 | 7.92 | 45 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-050 | 8 | 7.96 | 7.92 | 50 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-060 | 8 | 7.96 | 7.92 | 60 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-070 | 8 | 7.96 | 7.92 | 70 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-080 | 8 | 7.96 | 7.92 | 80 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-090 | 8 | 7.96 | 7.92 | 90 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |
| MRCCH-08-100 | 8 | 7.96 | 7.92 | 100 | 9.42 | 8 | 23.4 | 11.9 | 5.8 | 15 | 36.8 | 29.5 |

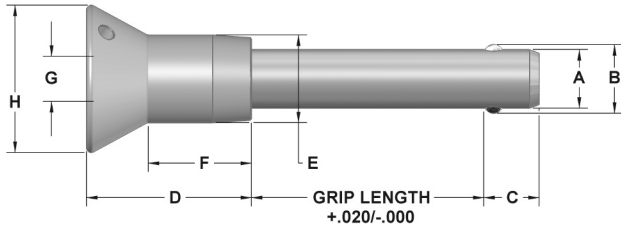
Stainless Steel Ring Handle | Metric (continued)



| Dia mm | Hole Size Max mm | Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|--------|------------------|--------|----------------------------|--------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | G mm | H mm | J mm | K mm |
|----------------|---------------------|----------|----------|----------------|--------------|-------------|------|------|------|------|------|------|
| MRCCH-10-015 | 10 | 9.96 | 9.92 | 15 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRCCH-10-020 | 10 | 9.96 | 9.92 | 20 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRCCH-10-025 | 10 | 9.96 | 9.92 | 25 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRCCH-10-030 | 10 | 9.96 | 9.92 | 30 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRCCH-10-035 | 10 | 9.96 | 9.92 | 35 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRCCH-10-040 | 10 | 9.96 | 9.92 | 40 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRCCH-10-045 | 10 | 9.96 | 9.92 | 45 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRCCH-10-050 | 10 | 9.96 | 9.92 | 50 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRCCH-10-060 | 10 | 9.96 | 9.92 | 60 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRCCH-10-070 | 10 | 9.96 | 9.92 | 70 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRCCH-10-080 | 10 | 9.96 | 9.92 | 80 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRCCH-10-090 | 10 | 9.96 | 9.92 | 90 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRCCH-10-100 | 10 | 9.96 | 9.92 | 100 | 11.86 | 9 | 25.7 | 14.2 | 7.4 | 16.5 | 38.6 | 29.5 |
| MRCCH-12-020 | 12 | 11.96 | 11.92 | 20 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRCCH-12-025 | 12 | 11.96 | 11.92 | 25 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRCCH-12-030 | 12 | 11.96 | 11.92 | 30 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRCCH-12-035 | 12 | 11.96 | 11.92 | 35 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRCCH-12-040 | 12 | 11.96 | 11.92 | 40 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRCCH-12-045 | 12 | 11.96 | 11.92 | 45 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRCCH-12-050 | 12 | 11.96 | 11.92 | 50 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRCCH-12-060 | 12 | 11.96 | 11.92 | 60 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRCCH-12-070 | 12 | 11.96 | 11.92 | 70 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRCCH-12-080 | 12 | 11.96 | 11.92 | 80 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRCCH-12-090 | 12 | 11.96 | 11.92 | 90 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRCCH-12-100 | 12 | 11.96 | 11.92 | 100 | 14.45 | 10 | 32.3 | 18.3 | 10.7 | 20.6 | 47.8 | 36.3 |
| MRCCH-16-025 | 16 | 15.96 | 15.92 | 25 | 19 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRCCH-16-030 | 16 | 15.96 | 15.92 | 30 | 19 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRCCH-16-035 | 16 | 15.96 | 15.92 | 35 | 19 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRCCH-16-040 | 16 | 15.96 | 15.92 | 40 | 19 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRCCH-16-045 | 16 | 15.96 | 15.92 | 45 | 19 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRCCH-16-050 | 16 | 15.96 | 15.92 | 50 | 19 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRCCH-16-060 | 16 | 15.96 | 15.92 | 60 | 19 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRCCH-16-070 | 16 | 15.96 | 15.92 | 70 | 19 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRCCH-16-080 | 16 | 15.96 | 15.92 | 80 | 19 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRCCH-16-090 | 16 | 15.96 | 15.92 | 90 | 19 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |
| MRCCH-16-100 | 16 | 15.96 | 15.92 | 100 | 19 | 14 | 41.9 | 23.9 | 13.7 | 26.9 | 65.3 | 43.7 |

Stainless Steel Nautical – Recessed Handle | Inch



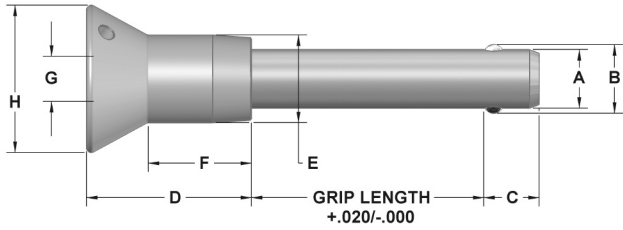
| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 3/16 | .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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. They are available in two stainless shank materials to meet your application. The handles are designed to prevent accidental release and are machined from 303 stainless steel. These pins are not supplied with stainless steel split rings. Pins in other grip lengths are available as special orders. See page 2 for complete specifications. If a lanyard is ordered with the recessed handle, the lanyard will be attached directly to the pin without a split ring.

| 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/- .005 | | D | E | F | Button | |
|----------------|----------------------|------------------|-------|-------|-------------|----------|------|-----|-----|-----|--------|-----|
| | | | | | | B | C | | | | G | H |
| NCCH-18-050 | — | 3/16 | .1885 | .1870 | .50 | .220 | .260 | .97 | .47 | .64 | .23 | .81 |
| NCCH-18-075 | — | 3/16 | .1885 | .1870 | .75 | .220 | .260 | .97 | .47 | .64 | .23 | .81 |
| NCCH-18-100 | — | 3/16 | .1885 | .1870 | 1.00 | .220 | .260 | .97 | .47 | .64 | .23 | .81 |
| NCCH-18-125 | — | 3/16 | .1885 | .1870 | 1.25 | .220 | .260 | .97 | .47 | .64 | .23 | .81 |
| NCCH-18-150 | — | 3/16 | .1885 | .1870 | 1.50 | .220 | .260 | .97 | .47 | .64 | .23 | .81 |
| NCCH-18-175 | — | 3/16 | .1885 | .1870 | 1.75 | .220 | .260 | .97 | .47 | .64 | .23 | .81 |
| NCCH-18-200 | — | 3/16 | .1885 | .1870 | 2.00 | .220 | .260 | .97 | .47 | .64 | .23 | .81 |
| NCCH-18-250 | — | 3/16 | .1885 | .1870 | 2.50 | .220 | .260 | .97 | .47 | .64 | .23 | .81 |
| NCCH-18-300 | — | 3/16 | .1885 | .1870 | 3.00 | .220 | .260 | .97 | .47 | .64 | .23 | .81 |
| NCCH-18-350 | — | 3/16 | .1885 | .1870 | 3.50 | .220 | .260 | .97 | .47 | .64 | .23 | .81 |
| NCCH-18-400 | — | 3/16 | .1885 | .1870 | 4.00 | .220 | .260 | .97 | .47 | .64 | .23 | .81 |
| NCCH-25-050 | NCCS-25-050 | 1/4 | .2485 | .2470 | .50 | .289 | .290 | .97 | .47 | .64 | .23 | .81 |
| NCCH-25-075 | NCCS-25-075 | 1/4 | .2485 | .2470 | .75 | .289 | .290 | .97 | .47 | .64 | .23 | .81 |
| NCCH-25-100 | NCCS-25-100 | 1/4 | .2485 | .2470 | 1.00 | .289 | .290 | .97 | .47 | .64 | .23 | .81 |
| NCCH-25-125 | NCCS-25-125 | 1/4 | .2485 | .2470 | 1.25 | .289 | .290 | .97 | .47 | .64 | .23 | .81 |
| NCCH-25-150 | NCCS-25-150 | 1/4 | .2485 | .2470 | 1.50 | .289 | .290 | .97 | .47 | .64 | .23 | .81 |
| NCCH-25-175 | NCCS-25-175 | 1/4 | .2485 | .2470 | 1.75 | .289 | .290 | .97 | .47 | .64 | .23 | .81 |
| NCCH-25-200 | NCCS-25-200 | 1/4 | .2485 | .2470 | 2.00 | .289 | .290 | .97 | .47 | .64 | .23 | .81 |
| NCCH-25-250 | NCCS-25-250 | 1/4 | .2485 | .2470 | 2.50 | .289 | .290 | .97 | .47 | .64 | .23 | .81 |
| NCCH-25-300 | NCCS-25-300 | 1/4 | .2485 | .2470 | 3.00 | .289 | .290 | .97 | .47 | .64 | .23 | .81 |
| NCCH-25-350 | NCCS-25-350 | 1/4 | .2485 | .2470 | 3.50 | .289 | .290 | .97 | .47 | .64 | .23 | .81 |
| NCCH-25-400 | NCCS-25-400 | 1/4 | .2485 | .2470 | 4.00 | .289 | .290 | .97 | .47 | .64 | .23 | .81 |
| NCCH-31-050 | NCCS-31-050 | 5/16 | .3110 | .3095 | .50 | .375 | .330 | .97 | .47 | .64 | .23 | .81 |
| NCCH-31-075 | NCCS-31-075 | 5/16 | .3110 | .3095 | .75 | .375 | .330 | .97 | .47 | .64 | .23 | .81 |
| NCCH-31-100 | NCCS-31-100 | 5/16 | .3110 | .3095 | 1.00 | .375 | .330 | .97 | .47 | .64 | .23 | .81 |
| NCCH-31-125 | NCCS-31-125 | 5/16 | .3110 | .3095 | 1.25 | .375 | .330 | .97 | .47 | .64 | .23 | .81 |
| NCCH-31-150 | NCCS-31-150 | 5/16 | .3110 | .3095 | 1.50 | .375 | .330 | .97 | .47 | .64 | .23 | .81 |
| NCCH-31-175 | NCCS-31-175 | 5/16 | .3110 | .3095 | 1.75 | .375 | .330 | .97 | .47 | .64 | .23 | .81 |
| NCCH-31-200 | NCCS-31-200 | 5/16 | .3110 | .3095 | 2.00 | .375 | .330 | .97 | .47 | .64 | .23 | .81 |
| NCCH-31-250 | NCCS-31-250 | 5/16 | .3110 | .3095 | 2.50 | .375 | .330 | .97 | .47 | .64 | .23 | .81 |
| NCCH-31-300 | NCCS-31-300 | 5/16 | .3110 | .3095 | 3.00 | .375 | .330 | .97 | .47 | .64 | .23 | .81 |
| NCCH-31-350 | NCCS-31-350 | 5/16 | .3110 | .3095 | 3.50 | .375 | .330 | .97 | .47 | .64 | .23 | .81 |
| NCCH-31-400 | NCCS-31-400 | 5/16 | .3110 | .3095 | 4.00 | .375 | .330 | .97 | .47 | .64 | .23 | .81 |

Stainless Steel Nautical – Recessed Handle | Inch (continued)

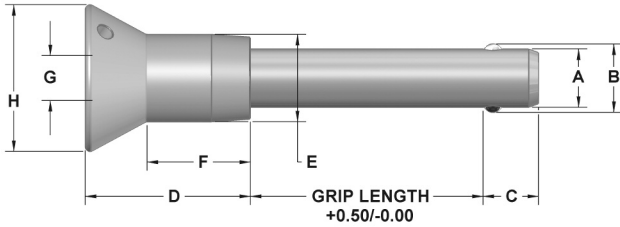


| Dia | Hole Size | | Min. Pull-Out Strength (lbs) | Calculated Double Shear (lbs) | | |
|------|-----------|-------|------------------------------|-------------------------------|----------------|-----------------------|
| | Max | Min | | 4130 Steel | 17-4 Stainless | 300 Series Stainless* |
| 3/16 | .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 |
| 5/8 | .6300 | .6250 | 2,070 | 51,200 | 57,500 | — |

*Note: 300 Series Stainless is not recommended in applications where shear forces are a factor.

| 17-4 SS Part # | 300 Series SS Part # | Nominal Diameter | A Max | A Min | Grip Length | +/-0.005 B | +0.000/-0.030 C | D | E | F | Button G H | |
|----------------|----------------------|------------------|-------|-------|-------------|------------|-----------------|------|-----|------|------------|------|
| NCCH-37-050 | NCCS-37-050 | 3/8 | .3735 | .3720 | .50 | .440 | .365 | 1.06 | .56 | .66 | .29 | .94 |
| NCCH-37-075 | NCCS-37-075 | 3/8 | .3735 | .3720 | .75 | .440 | .365 | 1.06 | .56 | .66 | .29 | .94 |
| NCCH-37-100 | NCCS-37-100 | 3/8 | .3735 | .3720 | 1.00 | .440 | .365 | 1.06 | .56 | .66 | .29 | .94 |
| NCCH-37-125 | NCCS-37-125 | 3/8 | .3735 | .3720 | 1.25 | .440 | .365 | 1.06 | .56 | .66 | .29 | .94 |
| NCCH-37-150 | NCCS-37-150 | 3/8 | .3735 | .3720 | 1.50 | .440 | .365 | 1.06 | .56 | .66 | .29 | .94 |
| NCCH-37-175 | NCCS-37-175 | 3/8 | .3735 | .3720 | 1.75 | .440 | .365 | 1.06 | .56 | .66 | .29 | .94 |
| NCCH-37-200 | NCCS-37-200 | 3/8 | .3735 | .3720 | 2.00 | .440 | .365 | 1.06 | .56 | .66 | .29 | .94 |
| NCCH-37-250 | NCCS-37-250 | 3/8 | .3735 | .3720 | 2.50 | .440 | .365 | 1.06 | .56 | .66 | .29 | .94 |
| NCCH-37-300 | NCCS-37-300 | 3/8 | .3735 | .3720 | 3.00 | .440 | .365 | 1.06 | .56 | .66 | .29 | .94 |
| NCCH-37-350 | NCCS-37-350 | 3/8 | .3735 | .3720 | 3.50 | .440 | .365 | 1.06 | .56 | .66 | .29 | .94 |
| NCCH-37-400 | NCCS-37-400 | 3/8 | .3735 | .3720 | 4.00 | .440 | .365 | 1.06 | .56 | .66 | .29 | .94 |
| NCCH-50-100 | NCCS-50-100 | 1/2 | .4985 | .4970 | 1.00 | .594 | .460 | 1.31 | .72 | .89 | .42 | 1.12 |
| NCCH-50-125 | NCCS-50-125 | 1/2 | .4985 | .4970 | 1.25 | .594 | .460 | 1.31 | .72 | .89 | .42 | 1.12 |
| NCCH-50-150 | NCCS-50-150 | 1/2 | .4985 | .4970 | 1.50 | .594 | .460 | 1.31 | .72 | .89 | .42 | 1.12 |
| NCCH-50-175 | NCCS-50-175 | 1/2 | .4985 | .4970 | 1.75 | .594 | .460 | 1.31 | .72 | .89 | .42 | 1.12 |
| NCCH-50-200 | NCCS-50-200 | 1/2 | .4985 | .4970 | 2.00 | .594 | .460 | 1.31 | .72 | .89 | .42 | 1.12 |
| NCCH-50-250 | NCCS-50-250 | 1/2 | .4985 | .4970 | 2.50 | .594 | .460 | 1.31 | .72 | .89 | .42 | 1.12 |
| NCCH-50-300 | NCCS-50-300 | 1/2 | .4985 | .4970 | 3.00 | .594 | .460 | 1.31 | .72 | .89 | .42 | 1.12 |
| NCCH-50-350 | NCCS-50-350 | 1/2 | .4985 | .4970 | 3.50 | .594 | .460 | 1.31 | .72 | .89 | .42 | 1.12 |
| NCCH-50-400 | NCCS-50-400 | 1/2 | .4985 | .4970 | 4.00 | .594 | .460 | 1.31 | .72 | .89 | .42 | 1.12 |
| NCCH-50-450 | NCCS-50-450 | 1/2 | .4985 | .4970 | 4.50 | .594 | .460 | 1.31 | .72 | .89 | .42 | 1.12 |
| NCCH-50-500 | NCCS-50-500 | 1/2 | .4985 | .4970 | 5.00 | .594 | .460 | 1.31 | .72 | .89 | .42 | 1.12 |
| NCCH-50-550 | NCCS-50-550 | 1/2 | .4985 | .4970 | 5.50 | .594 | .460 | 1.31 | .72 | .89 | .42 | 1.12 |
| NCCH-50-600 | NCCS-50-600 | 1/2 | .4985 | .4970 | 6.00 | .594 | .460 | 1.31 | .72 | .89 | .42 | 1.12 |
| NCCH-62-150 | — | 5/8 | .6235 | .6220 | 1.50 | .750 | .580 | 1.69 | .94 | 1.12 | .54 | 1.44 |
| NCCH-62-175 | — | 5/8 | .6235 | .6220 | 1.75 | .750 | .580 | 1.69 | .94 | 1.12 | .54 | 1.44 |
| NCCH-62-200 | — | 5/8 | .6235 | .6220 | 2.00 | .750 | .580 | 1.69 | .94 | 1.12 | .54 | 1.44 |
| NCCH-62-250 | — | 5/8 | .6235 | .6220 | 2.50 | .750 | .580 | 1.69 | .94 | 1.12 | .54 | 1.44 |
| NCCH-62-300 | — | 5/8 | .6235 | .6220 | 3.00 | .750 | .580 | 1.69 | .94 | 1.12 | .54 | 1.44 |
| NCCH-62-350 | — | 5/8 | .6235 | .6220 | 3.50 | .750 | .580 | 1.69 | .94 | 1.12 | .54 | 1.44 |
| NCCH-62-400 | — | 5/8 | .6235 | .6220 | 4.00 | .750 | .580 | 1.69 | .94 | 1.12 | .54 | 1.44 |
| NCCH-62-450 | — | 5/8 | .6235 | .6220 | 4.50 | .750 | .580 | 1.69 | .94 | 1.12 | .54 | 1.44 |
| NCCH-62-500 | — | 5/8 | .6235 | .6220 | 5.00 | .750 | .580 | 1.69 | .94 | 1.12 | .54 | 1.44 |
| NCCH-62-550 | — | 5/8 | .6235 | .6220 | 5.50 | .750 | .580 | 1.69 | .94 | 1.12 | .54 | 1.44 |
| NCCH-62-600 | — | 5/8 | .6235 | .6220 | 6.00 | .750 | .580 | 1.69 | .94 | 1.12 | .54 | 1.44 |

Stainless Steel Nautical - Recessed Handle | Metric

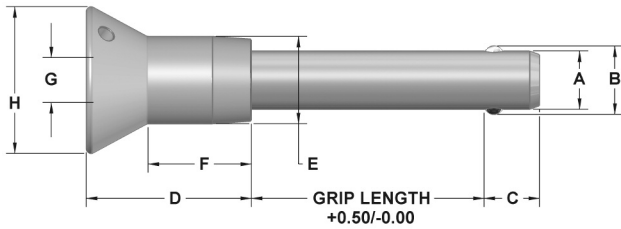


| Dia mm | Hole Size Max mm | Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|--------|------------------|--------|----------------------------|--------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

These positive locking quick release pins have a wide range of uses in fastening, locating, and alignment applications. The pins will not release until the button on the handle is depressed. Once the button is depressed, the balls retract into the shank allowing the pin to be inserted or removed into or out of a hole. The handles are designed to prevent accidental release and are machined from 303 stainless steel. The shafts are made from 17-4PH stainless steel. These pins are not supplied with stainless steel split rings. Pins in other grip lengths are available as special orders. See page 2 for complete specifications. Compliant to RoHS requirements. If a lanyard is ordered with the recessed handle, the lanyard will be attached directly to the pin without a split ring.

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | F mm | Button G mm | H mm |
|----------------|---------------------|----------|----------|----------------|--------------|-------------|------|------|------|-------------|------|
| MNCCH-05-010 | 5 | 4.96 | 4.92 | 10 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-05-015 | 5 | 4.96 | 4.92 | 15 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-05-020 | 5 | 4.96 | 4.92 | 20 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-05-025 | 5 | 4.96 | 4.92 | 25 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-05-030 | 5 | 4.96 | 4.92 | 30 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-05-035 | 5 | 4.96 | 4.92 | 35 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-05-040 | 5 | 4.96 | 4.92 | 40 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-05-045 | 5 | 4.96 | 4.92 | 45 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-05-050 | 5 | 4.96 | 4.92 | 50 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-05-060 | 5 | 4.96 | 4.92 | 60 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-05-070 | 5 | 4.96 | 4.92 | 70 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-05-080 | 5 | 4.96 | 4.92 | 80 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-05-090 | 5 | 4.96 | 4.92 | 90 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-05-100 | 5 | 4.96 | 4.92 | 100 | 5.54 | 6 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-010 | 6 | 5.96 | 5.92 | 10 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-015 | 6 | 5.96 | 5.92 | 15 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-020 | 6 | 5.96 | 5.92 | 20 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-025 | 6 | 5.96 | 5.92 | 25 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-030 | 6 | 5.96 | 5.92 | 30 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-035 | 6 | 5.96 | 5.92 | 35 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-040 | 6 | 5.96 | 5.92 | 40 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-045 | 6 | 5.96 | 5.92 | 45 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-050 | 6 | 5.96 | 5.92 | 50 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-060 | 6 | 5.96 | 5.92 | 60 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-070 | 6 | 5.96 | 5.92 | 70 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-080 | 6 | 5.96 | 5.92 | 80 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-090 | 6 | 5.96 | 5.92 | 90 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-06-100 | 6 | 5.96 | 5.92 | 100 | 6.99 | 7 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-010 | 8 | 7.96 | 7.92 | 10 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-015 | 8 | 7.96 | 7.92 | 15 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-020 | 8 | 7.96 | 7.92 | 20 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-025 | 8 | 7.96 | 7.92 | 25 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-030 | 8 | 7.96 | 7.92 | 30 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-035 | 8 | 7.96 | 7.92 | 35 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-040 | 8 | 7.96 | 7.92 | 40 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-045 | 8 | 7.96 | 7.92 | 45 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-050 | 8 | 7.96 | 7.92 | 50 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-060 | 8 | 7.96 | 7.92 | 60 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-070 | 8 | 7.96 | 7.92 | 70 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-080 | 8 | 7.96 | 7.92 | 80 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-090 | 8 | 7.96 | 7.92 | 90 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |
| MNCCH-08-100 | 8 | 7.96 | 7.92 | 100 | 9.42 | 8 | 24.6 | 11.9 | 16.3 | 5.8 | 20.6 |

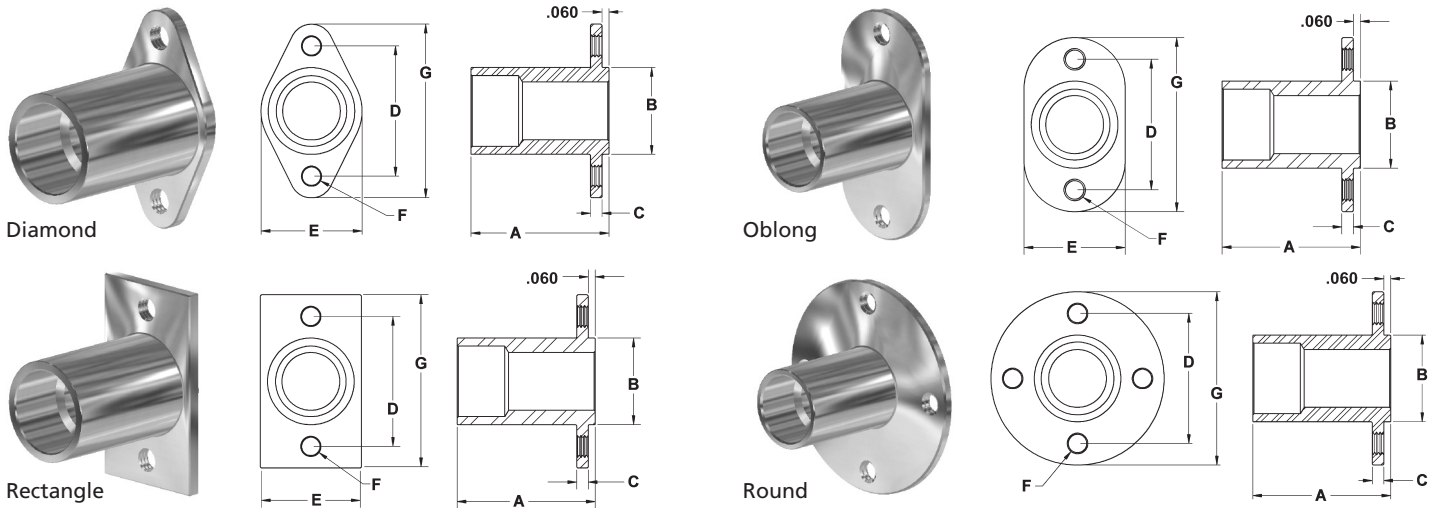
Stainless Steel Nautical - Recessed Handle | Metric (continued)



| Dia mm | Hole Size Max mm | Min mm | Min. Pull-Out Strength (N) | Calculated Double Shear (N) 17-4 Stainless |
|-----------|------------------------|-----------|----------------------------------|--------------------------------------------------|
| 5 | 5.1 | 5.0 | 890 | 24,400 |
| 6 | 6.1 | 6.0 | 1,023 | 35,640 |
| 8 | 8.1 | 8.0 | 2,268 | 63,804 |
| 10 | 10.1 | 10.0 | 2,558 | 100,101 |
| 12 | 12.1 | 12.0 | 5,160 | 144,060 |
| 16 | 16.1 | 16.0 | 9,207 | 257,179 |

| 17-4 SS Part # | Nominal Diameter mm | A Max mm | A Min mm | Grip Length mm | +/-0.25 B mm | +/-1.0 C mm | D mm | E mm | F mm | Button G mm | H mm |
|-------------------|---------------------------|----------------|----------------|----------------------|--------------------|-------------------|---------|---------|---------|-------------------|---------|
| MNCCH-10-015 | 10 | 9.96 | 9.92 | 15 | 11.86 | 9 | 26.9 | 14.2 | 16.8 | 7.4 | 23.9 |
| MNCCH-10-020 | 10 | 9.96 | 9.92 | 20 | 11.86 | 9 | 26.9 | 14.2 | 16.8 | 7.4 | 23.9 |
| MNCCH-10-025 | 10 | 9.96 | 9.92 | 25 | 11.86 | 9 | 26.9 | 14.2 | 16.8 | 7.4 | 23.9 |
| MNCCH-10-030 | 10 | 9.96 | 9.92 | 30 | 11.86 | 9 | 26.9 | 14.2 | 16.8 | 7.4 | 23.9 |
| MNCCH-10-035 | 10 | 9.96 | 9.92 | 35 | 11.86 | 9 | 26.9 | 14.2 | 16.8 | 7.4 | 23.9 |
| MNCCH-10-040 | 10 | 9.96 | 9.92 | 40 | 11.86 | 9 | 26.9 | 14.2 | 16.8 | 7.4 | 23.9 |
| MNCCH-10-045 | 10 | 9.96 | 9.92 | 45 | 11.86 | 9 | 26.9 | 14.2 | 16.8 | 7.4 | 23.9 |
| MNCCH-10-050 | 10 | 9.96 | 9.92 | 50 | 11.86 | 9 | 26.9 | 14.2 | 16.8 | 7.4 | 23.9 |
| MNCCH-10-060 | 10 | 9.96 | 9.92 | 60 | 11.86 | 9 | 26.9 | 14.2 | 16.8 | 7.4 | 23.9 |
| MNCCH-10-070 | 10 | 9.96 | 9.92 | 70 | 11.86 | 9 | 26.9 | 14.2 | 16.8 | 7.4 | 23.9 |
| MNCCH-10-080 | 10 | 9.96 | 9.92 | 80 | 11.86 | 9 | 26.9 | 14.2 | 16.8 | 7.4 | 23.9 |
| MNCCH-10-090 | 10 | 9.96 | 9.92 | 90 | 11.86 | 9 | 26.9 | 14.2 | 16.8 | 7.4 | 23.9 |
| MNCCH-10-100 | 10 | 9.96 | 9.92 | 100 | 11.86 | 9 | 26.9 | 14.2 | 16.8 | 7.4 | 23.9 |
| MNCCH-12-020 | 12 | 11.96 | 11.92 | 20 | 14.45 | 10 | 33.3 | 18.3 | 22.6 | 10.7 | 28.4 |
| MNCCH-12-025 | 12 | 11.96 | 11.92 | 25 | 14.45 | 10 | 33.3 | 18.3 | 22.6 | 10.7 | 28.4 |
| MNCCH-12-030 | 12 | 11.96 | 11.92 | 30 | 14.45 | 10 | 33.3 | 18.3 | 22.6 | 10.7 | 28.4 |
| MNCCH-12-035 | 12 | 11.96 | 11.92 | 35 | 14.45 | 10 | 33.3 | 18.3 | 22.6 | 10.7 | 28.4 |
| MNCCH-12-040 | 12 | 11.96 | 11.92 | 40 | 14.45 | 10 | 33.3 | 18.3 | 22.6 | 10.7 | 28.4 |
| MNCCH-12-045 | 12 | 11.96 | 11.92 | 45 | 14.45 | 10 | 33.3 | 18.3 | 22.6 | 10.7 | 28.4 |
| MNCCH-12-050 | 12 | 11.96 | 11.92 | 50 | 14.45 | 10 | 33.3 | 18.3 | 22.6 | 10.7 | 28.4 |
| MNCCH-12-060 | 12 | 11.96 | 11.92 | 60 | 14.45 | 10 | 33.3 | 18.3 | 22.6 | 10.7 | 28.4 |
| MNCCH-12-070 | 12 | 11.96 | 11.92 | 70 | 14.45 | 10 | 33.3 | 18.3 | 22.6 | 10.7 | 28.4 |
| MNCCH-12-080 | 12 | 11.96 | 11.92 | 80 | 14.45 | 10 | 33.3 | 18.3 | 22.6 | 10.7 | 28.4 |
| MNCCH-12-090 | 12 | 11.96 | 11.92 | 90 | 14.45 | 10 | 33.3 | 18.3 | 22.6 | 10.7 | 28.4 |
| MNCCH-12-100 | 12 | 11.96 | 11.92 | 100 | 14.45 | 10 | 33.3 | 18.3 | 22.6 | 10.7 | 28.4 |
| MNCCH-16-025 | 16 | 15.96 | 15.92 | 25 | 19 | 14 | 42.9 | 23.8 | 28.5 | 13.7 | 36.5 |
| MNCCH-16-030 | 16 | 15.96 | 15.92 | 30 | 19 | 14 | 42.9 | 23.8 | 28.5 | 13.7 | 36.5 |
| MNCCH-16-035 | 16 | 15.96 | 15.92 | 35 | 19 | 14 | 42.9 | 23.8 | 28.5 | 13.7 | 36.5 |
| MNCCH-16-040 | 16 | 15.96 | 15.92 | 40 | 19 | 14 | 42.9 | 23.8 | 28.5 | 13.7 | 36.5 |
| MNCCH-16-045 | 16 | 15.96 | 15.92 | 45 | 19 | 14 | 42.9 | 23.8 | 28.5 | 13.7 | 36.5 |
| MNCCH-16-050 | 16 | 15.96 | 15.92 | 50 | 19 | 14 | 42.9 | 23.8 | 28.5 | 13.7 | 36.5 |
| MNCCH-16-060 | 16 | 15.96 | 15.92 | 60 | 19 | 14 | 42.9 | 23.8 | 28.5 | 13.7 | 36.5 |
| MNCCH-16-070 | 16 | 15.96 | 15.92 | 70 | 19 | 14 | 42.9 | 23.8 | 28.5 | 13.7 | 36.5 |
| MNCCH-16-080 | 16 | 15.96 | 15.92 | 80 | 19 | 14 | 42.9 | 23.8 | 28.5 | 13.7 | 36.5 |
| MNCCH-16-090 | 16 | 15.96 | 15.92 | 90 | 19 | 14 | 42.9 | 23.8 | 28.5 | 13.7 | 36.5 |
| MNCCH-16-100 | 16 | 15.96 | 15.92 | 100 | 19 | 14 | 42.9 | 23.8 | 28.5 | 13.7 | 36.5 |

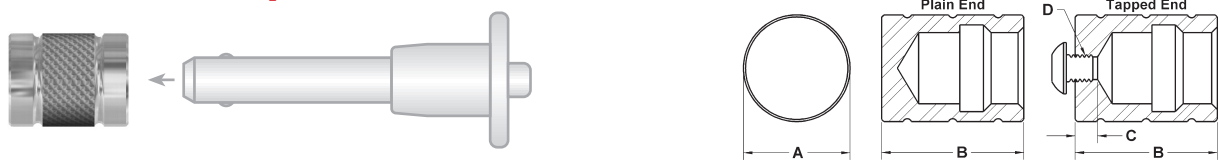
Ball Lock Pin Flange Receptacles | Inch



The flanged receptacles provide a permanent and proper mating hole for quick release ball lock pins. They are designed for use on materials and in applications where the pin does not have anything to lock against. Because the pin does not protrude out the bottom of the receptacles, they are ideal for blind-hole applications. The receptacles can be mounted with screws, rivets or bolts. They are made from 303 stainless steel. The "Grip Length Reduction" is the amount of pin that is inside the receptacle and reducing the useable length of the pin by this amount. The quick release ball lock pins are inserted from the flanged end.

| Part # | For Use With Pin Diameter | Flange Style | +/.000/-.005 A | +/.005 B | +/.005 C | +/.005 D | +/.010 E | F | +/.010 G | Grip Length Reduction |
|----------|---------------------------|--------------|----------------|----------|----------|----------|----------|-------|----------|-----------------------|
| DIFR-187 | 3/16 | Diamond | .650 | .375 | .060 | 1.000 | .625 | 6-32 | 1.250 | .375 |
| DIFR-250 | 1/4 | Diamond | .650 | .375 | .060 | 1.000 | .625 | 6-32 | 1.250 | .375 |
| DIFR-312 | 5/16 | Diamond | .783 | .469 | .060 | 1.000 | .625 | 6-32 | 1.250 | .500 |
| DIFR-375 | 3/8 | Diamond | .913 | .562 | .060 | 1.000 | .625 | 6-32 | 1.250 | .562 |
| DIFR-500 | 1/2 | Diamond | 1.195 | .750 | .100 | 1.125 | .875 | 10-32 | 1.500 | .750 |
| OBFR-187 | 3/16 | Oblong | .650 | .375 | .060 | 1.000 | .625 | 6-32 | 1.250 | .375 |
| OBFR-250 | 1/4 | Oblong | .650 | .375 | .060 | 1.000 | .625 | 6-32 | 1.250 | .375 |
| OBFR-312 | 5/16 | Oblong | .783 | .469 | .060 | 1.000 | .625 | 6-32 | 1.250 | .500 |
| OBFR-375 | 3/8 | Oblong | .913 | .562 | .060 | 1.000 | .625 | 6-32 | 1.250 | .562 |
| OBFR-500 | 1/2 | Oblong | 1.195 | .750 | .100 | 1.125 | .875 | 10-32 | 1.500 | .750 |
| REFR-187 | 3/16 | Rectangle | .650 | .375 | .060 | 1.000 | .625 | 6-32 | 1.250 | .375 |
| REFR-250 | 1/4 | Rectangle | .650 | .375 | .060 | 1.000 | .625 | 6-32 | 1.250 | .375 |
| REFR-312 | 5/16 | Rectangle | .783 | .469 | .060 | 1.000 | .625 | 6-32 | 1.250 | .500 |
| REFR-375 | 3/8 | Rectangle | .913 | .562 | .060 | 1.000 | .625 | 6-32 | 1.250 | .562 |
| ROFR-187 | 3/16 | Round | .650 | .375 | .060 | 1.000 | — | 6-32 | 1.250 | .375 |
| ROFR-250 | 1/4 | Round | .650 | .375 | .060 | 1.000 | — | 6-32 | 1.250 | .375 |
| ROFR-312 | 5/16 | Round | .783 | .469 | .060 | 1.000 | — | 6-32 | 1.250 | .500 |
| ROFR-375 | 3/8 | Round | .913 | .562 | .060 | 1.000 | — | 6-32 | 1.250 | .562 |
| ROFR-500 | 1/2 | Round | 1.195 | .750 | .100 | 1.125 | — | 10-32 | 1.500 | .750 |

Ball Lock Pin End Caps | Inch

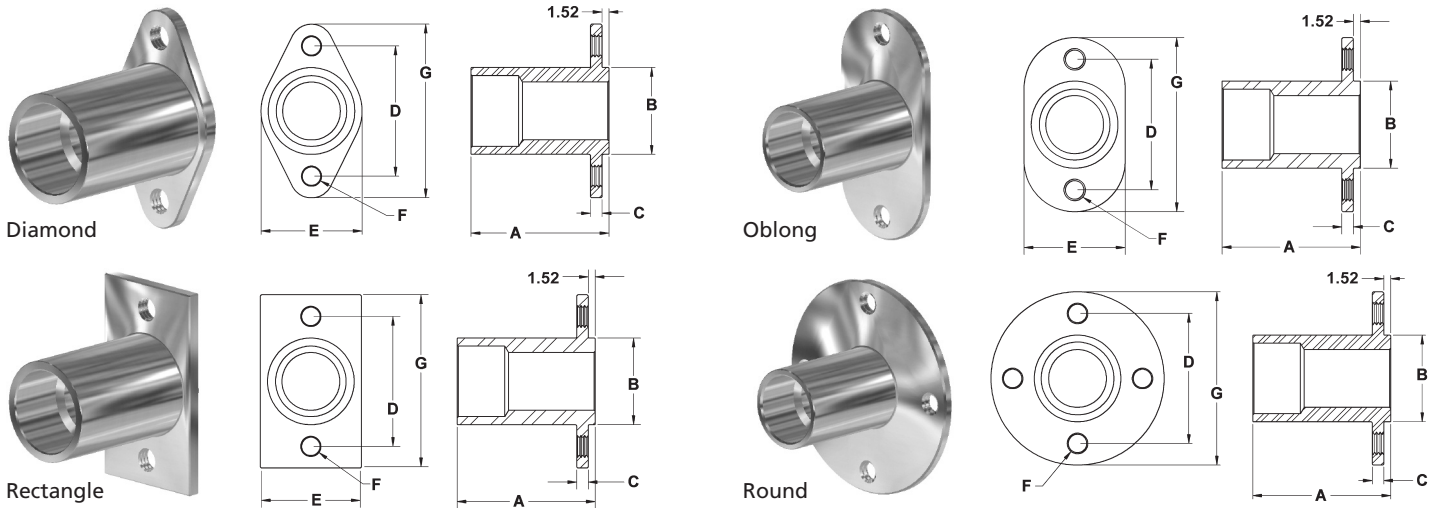


These end caps fit over the end of the quick release ball lock pin and allow the pins to be used in applications where the receiving hole is not within tolerance or is out of round. The receiver caps can replace cotter pins and hitch pins to allow you to take advantage of quick changing and fieldwork without tools. The caps are made from 303 stainless steel. The "Grip Length Reduction" is the amount of pin that is inside the end cap which reduces the useable length of the pin by this amount. The end caps with the tapped ends allow the user to attach a lanyard to the end cap so it does not get lost while not in use. A stainless button head cap screw is included with the tapped hole style.

| Plain End Part # | Tapped End Part # | For Use With Pin Diameter | A Diameter | B Length | C* Screw Depth | D Thread | Grip Length Reduction |
|------------------|-------------------|---------------------------|------------|----------|----------------|----------|-----------------------|
| RC-187 | RCT-187 | 3/16 | .375 | .580 | .12 | 10-32 | .125 |
| RC-250 | RCT-250 | 1/4 | .375 | .580 | .12 | 10-32 | .125 |
| RC-312 | RCT-312 | 5/16 | .500 | .625 | .12 | 10-32 | .125 |
| RC-375 | RCT-375 | 3/8 | .563 | .730 | .18 | 10-32 | .187 |
| RC-500 | RCT-500 | 1/2 | .750 | 1.000 | .18 | 10-32 | .250 |
| RC-625 | RCT-625 | 5/8 | 1.000 | 1.250 | .18 | 1/4-28 | .250 |

* Maximum Screw Depth

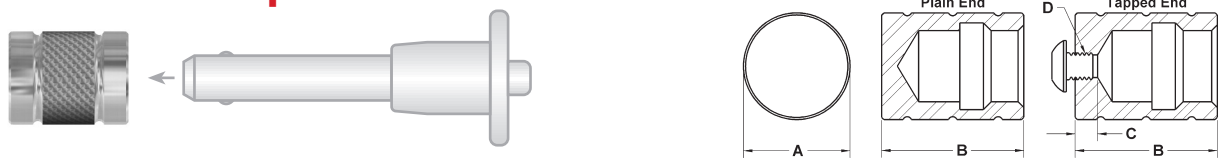
Ball Lock Pin Flange Receptacles | Metric



These flanged receptacles provide a permanent and proper mating hole for quick release ball lock pins. They are designed for use on materials and in applications where the pin does not have anything to lock against. Because the pin does not protrude out the bottom of the receptacles, they are ideal for blind-hole applications. The receptacles can be mounted with screws, rivets or bolts. They are made from 303 stainless steel. The "Grip Length Reduction" is the amount of pin that is inside the receptacle and reducing the useable length of the pin by this amount. The quick release ball lock pins are inserted from the flanged end.

| Part# | For Use With Pin Diameter | Flange Style | +0.00/-0.13 A mm | +/-0.13 B mm | +/-0.13 C mm | +/-0.13 D mm | +/-0.25 E mm | F mm | +/-0.25 G mm | Grip Length Reduction mm |
|----------|---------------------------|--------------|------------------------|--------------------|--------------------|--------------------|--------------------|---------|--------------------|-----------------------------|
| MDIFR-05 | 5mm | Diamond | 16.51 | 9.53 | 1.52 | 25 | 15.88 | M4 | 31.75 | 10 |
| MDIFR-06 | 6mm | Diamond | 16.51 | 9.53 | 1.52 | 25 | 15.88 | M4 | 31.75 | 10 |
| MDIFR-08 | 8mm | Diamond | 19.89 | 11.91 | 1.52 | 25 | 15.88 | M4 | 31.75 | 13 |
| MDIFR-10 | 10mm | Diamond | 23.19 | 14.29 | 1.52 | 25 | 15.88 | M4 | 31.75 | 15 |
| MDIFR-12 | 12mm | Diamond | 30.35 | 19.05 | 2.54 | 29 | 22.23 | M5 | 38.10 | 20 |
| MOBFR-05 | 5mm | Oblong | 16.51 | 9.53 | 1.52 | 25 | 15.88 | M4 | 31.75 | 10 |
| MOBFR-06 | 6mm | Oblong | 16.51 | 9.53 | 1.52 | 25 | 15.88 | M4 | 31.75 | 10 |
| MOBFR-08 | 8mm | Oblong | 19.89 | 11.91 | 1.52 | 25 | 15.88 | M4 | 31.75 | 13 |
| MOBFR-10 | 10mm | Oblong | 23.19 | 14.29 | 1.52 | 25 | 15.88 | M4 | 31.75 | 15 |
| MOBFR-12 | 12mm | Oblong | 30.35 | 19.05 | 2.54 | 29 | 22.23 | M5 | 38.10 | 20 |
| MREFR-05 | 5mm | Rectangle | 16.51 | 9.53 | 1.52 | 25 | 15.88 | M4 | 31.75 | 10 |
| MREFR-06 | 6mm | Rectangle | 16.51 | 9.53 | 1.52 | 25 | 15.88 | M4 | 31.75 | 10 |
| MREFR-08 | 8mm | Rectangle | 19.89 | 11.91 | 1.52 | 25 | 15.88 | M4 | 31.75 | 13 |
| MREFR-10 | 10mm | Rectangle | 23.19 | 14.29 | 1.52 | 25 | 15.88 | M4 | 31.75 | 15 |
| MROFR-05 | 5mm | Round | 16.51 | 9.53 | 1.52 | 25 | — | M4 | 31.75 | 10 |
| MROFR-06 | 6mm | Round | 16.51 | 9.53 | 1.52 | 25 | — | M4 | 31.75 | 10 |
| MROFR-08 | 8mm | Round | 19.89 | 11.91 | 1.52 | 25 | — | M4 | 31.75 | 13 |
| MROFR-10 | 10mm | Round | 23.19 | 14.29 | 1.52 | 25 | — | M4 | 31.75 | 15 |
| MROFR-12 | 12mm | Round | 30.35 | 19.05 | 2.54 | 29 | — | M5 | 38.10 | 20 |

Ball Lock Pin End Caps | Metric

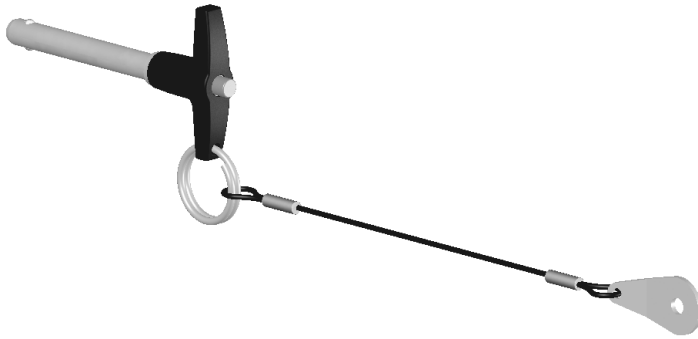


These end caps fit over the end of the quick release ball lock pin and allow the pins to be used in applications where the receiving hole is not within tolerance or is out of round. The receiver caps can replace cotter pins and hitch pins to allow you to take advantage of quick changing and fieldwork without tools. The caps are made from 303 stainless steel. The "Grip Length Reduction" is the amount of pin that is inside the end cap which reduces the useable length of the pin by this amount. The end caps with the tapped ends allow the user to attach a lanyard to the end cap so it does not get lost while not in use. A stainless button head cap screw is included with the tapped hole style.

| Plain End Part # | Tapped End Part # | For Use With Pin Diameter | A Diameter mm | B Length mm | C* Screw Depth mm | D Thread mm | Grip Length Reduction mm |
|------------------|-------------------|---------------------------|---------------------|-------------------|-------------------------|-------------------|-----------------------------|
| MRC-05 | MRCT-05 | 5mm | 9.53 | 14.73 | 3 | M5 | 3 |
| MRC-06 | MRCT-06 | 6mm | 9.53 | 14.73 | 3 | M5 | 3 |
| MRC-08 | MRCT-08 | 8mm | 12.70 | 15.88 | 3 | M5 | 3 |
| MRC-10 | MRCT-10 | 10mm | 14.29 | 18.54 | 4 | M5 | 5 |
| MRC-12 | MRCT-12 | 12mm | 19.05 | 25.40 | 4 | M5 | 6 |
| MRC-16 | MRCT-16 | 16mm | 25.40 | 31.75 | 5 | M6 | 6 |

* Maximum Screw Depth

Wire Rope Lanyard Assemblies

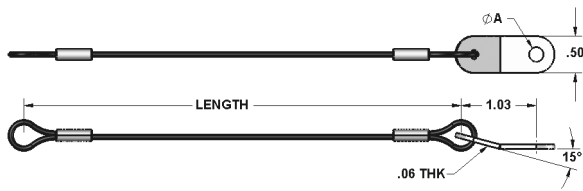


Wire rope lanyard assemblies are used to attach quick release pins to a fixture or frame, to prevent the pins from being misplaced while they are not in use. All of the wire rope lanyard assemblies listed below are supplied with 7 x 7 stainless steel wire and are available either uncovered (bare cable) or covered. The vinyl covered assemblies are available in either clear, black or green. All tabs and eyelets are manufactured from 300 series stainless steel. The assemblies are available with either zinc plated copper sleeves or stainless sleeves. In addition to the standard parts listed below, we can provide custom lanyards based on your exact requirements.

Wire Rope Lanyard Assembly Specifications

| | |
|---------------------|------------------------------------------------------------------------------------|
| Wire Rope: | 7x7 Stainless Steel Wire (RR-W-410) |
| Covering: | Vinyl (MIL-I-631) |
| Covered Wire Sizes: | 3/64" Wire – Covering to 1/16" 1/16" Wire – Covering to 1/8" |
| Rated Strengths: | 3/64" Wire = 270 lbs. 1/16" Wire = 480 lbs Assemblies with Eyelets = 30 lbs. |
| Sleeves: | Copper - Zinc Plated (MIL-51844) Stainless Steel (MIL-51844) |
| Tabs: | 300 Series Stainless Steel (ASTM AA240/A666) |
| Eyelets: | 300 Series Stainless Steel |

Loop / Rectangular Tab



ZINC PLATED COPPER SLEEVES

| Clear Part # | Black Part # | Green Part # | Uncovered Part # |
|--------------|--------------|--------------|------------------|
| LCL-3-06-R20 | LBK-3-06-R20 | LGR-3-06-R20 | LNC-3-06-R20 |
| LCL-3-08-R20 | LBK-3-08-R20 | LGR-3-08-R20 | LNC-3-08-R20 |
| LCL-3-10-R20 | LBK-3-10-R20 | LGR-3-10-R20 | LNC-3-10-R20 |
| LCL-3-12-R20 | LBK-3-12-R20 | LGR-3-12-R20 | LNC-3-12-R20 |
| LCL-3-06-R28 | LBK-3-06-R28 | LGR-3-06-R28 | LNC-3-06-R28 |
| LCL-3-08-R28 | LBK-3-08-R28 | LGR-3-08-R28 | LNC-3-08-R28 |
| LCL-3-10-R28 | LBK-3-10-R28 | LGR-3-10-R28 | LNC-3-10-R28 |
| LCL-3-12-R28 | LBK-3-12-R28 | LGR-3-12-R28 | LNC-3-12-R28 |
| LCL-1-06-R20 | LBK-1-06-R20 | LGR-1-06-R20 | LNC-1-06-R20 |
| LCL-1-08-R20 | LBK-1-08-R20 | LGR-1-08-R20 | LNC-1-08-R20 |
| LCL-1-10-R20 | LBK-1-10-R20 | LGR-1-10-R20 | LNC-1-10-R20 |
| LCL-1-12-R20 | LBK-1-12-R20 | LGR-1-12-R20 | LNC-1-12-R20 |
| LCL-1-06-R28 | LBK-1-06-R28 | LGR-1-06-R28 | LNC-1-06-R28 |
| LCL-1-08-R28 | LBK-1-08-R28 | LGR-1-08-R28 | LNC-1-08-R28 |
| LCL-1-10-R28 | LBK-1-10-R28 | LGR-1-10-R28 | LNC-1-10-R28 |
| LCL-1-12-R28 | LBK-1-12-R28 | LGR-1-12-R28 | LNC-1-12-R28 |

STAINLESS STEEL SLEEVES

| Clear Part # | Black Part # | Green Part # | Uncovered Part # | Wire Diameter | Length | A |
|--------------|--------------|--------------|------------------|---------------|--------|-----|
| LCLC3-06R20 | LBKC3-06R20 | LGRC3-06R20 | LNCC3-06R20 | 3/64 | 6 | .20 |
| LCLC3-08R20 | LBKC3-08R20 | LGRC3-08R20 | LNCC3-08R20 | 3/64 | 8 | .20 |
| LCLC3-10R20 | LBKC3-10R20 | LGRC3-10R20 | LNCC3-10R20 | 3/64 | 10 | .20 |
| LCLC3-12R20 | LBKC3-12R20 | LGRC3-12R20 | LNCC3-12R20 | 3/64 | 12 | .20 |
| LCLC3-06R28 | LBKC3-06R28 | LGRC3-06R28 | LNCC3-06R28 | 3/64 | 6 | .28 |
| LCLC3-08R28 | LBKC3-08R28 | LGRC3-08R28 | LNCC3-08R28 | 3/64 | 8 | .28 |
| LCLC3-10R28 | LBKC3-10R28 | LGRC3-10R28 | LNCC3-10R28 | 3/64 | 10 | .28 |
| LCLC3-12R28 | LBKC3-12R28 | LGRC3-12R28 | LNCC3-12R28 | 3/64 | 12 | .28 |
| LCLC1-06R20 | LBKC1-06R20 | LGRC1-06R20 | LNCC1-06R20 | 1/16 | 6 | .20 |
| LCLC1-08R20 | LBKC1-08R20 | LGRC1-08R20 | LNCC1-08R20 | 1/16 | 8 | .20 |
| LCLC1-10R20 | LBKC1-10R20 | LGRC1-10R20 | LNCC1-10R20 | 1/16 | 10 | .20 |
| LCLC1-12R20 | LBKC1-12R20 | LGRC1-12R20 | LNCC1-12R20 | 1/16 | 12 | .20 |
| LCLC1-06R28 | LBKC1-06R28 | LGRC1-06R28 | LNCC1-06R28 | 1/16 | 6 | .28 |
| LCLC1-08R28 | LBKC1-08R28 | LGRC1-08R28 | LNCC1-08R28 | 1/16 | 8 | .28 |
| LCLC1-10R28 | LBKC1-10R28 | LGRC1-10R28 | LNCC1-10R28 | 1/16 | 10 | .28 |
| LCLC1-12R28 | LBKC1-12R28 | LGRC1-12R28 | LNCC1-12R28 | 1/16 | 12 | .28 |

Loop / Loop



ZINC PLATED COPPER SLEEVES

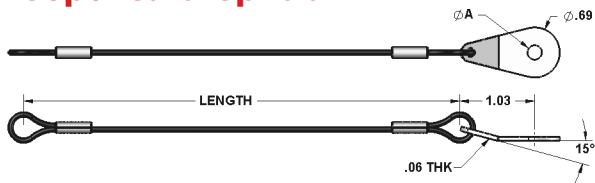
| Clear Part # | Black Part # | Green Part # | Uncovered Part # |
|--------------|--------------|--------------|------------------|
| LCL-3-06 | LBK-3-06 | LGR-3-06 | LNC-3-06 |
| LCL-3-08 | LBK-3-08 | LGR-3-08 | LNC-3-08 |
| LCL-3-10 | LBK-3-10 | LGR-3-10 | LNC-3-10 |
| LCL-3-12 | LBK-3-12 | LGR-3-12 | LNC-3-12 |
| LCL-1-06 | LBK-1-06 | LGR-1-06 | LNC-1-06 |
| LCL-1-08 | LBK-1-08 | LGR-1-08 | LNC-1-08 |
| LCL-1-10 | LBK-1-10 | LGR-1-10 | LNC-1-10 |
| LCL-1-12 | LBK-1-12 | LGR-1-12 | LNC-1-12 |

STAINLESS STEEL SLEEVES

| Clear Part # | Black Part # | Green Part # | Uncovered Part # | Wire Diameter | Length |
|--------------|--------------|--------------|------------------|---------------|--------|
| LCLC3-06 | LBKC3-06 | LGRC3-06 | LNCC3-06 | 3/64 | 6 |
| LCLC3-08 | LBKC3-08 | LGRC3-08 | LNCC3-08 | 3/64 | 8 |
| LCLC3-10 | LBKC3-10 | LGRC3-10 | LNCC3-10 | 3/64 | 10 |
| LCLC3-12 | LBKC3-12 | LGRC3-12 | LNCC3-12 | 3/64 | 12 |
| LCLC1-06 | LBKC1-06 | LGRC1-06 | LNCC1-06 | 1/16 | 6 |
| LCLC1-08 | LBKC1-08 | LGRC1-08 | LNCC1-08 | 1/16 | 8 |
| LCLC1-10 | LBKC1-10 | LGRC1-10 | LNCC1-10 | 1/16 | 10 |
| LCLC1-12 | LBKC1-12 | LGRC1-12 | LNCC1-12 | 1/16 | 12 |

Wire Rope Lanyard Assemblies

Loop / Teardrop Tab



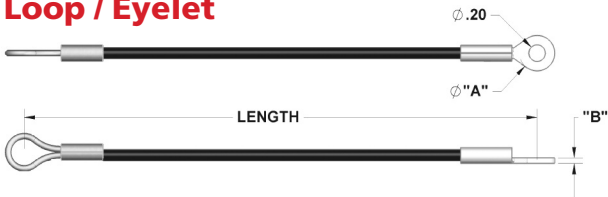
ZINC PLATED COPPER SLEEVES

| Clear Part # | Black Part # | Green Part # | Uncovered Part # |
|--------------|--------------|--------------|------------------|
| LCL-3-06-T20 | LBK-3-06-T20 | LGR-3-06-T20 | LNC-3-06-T20 |
| LCL-3-08-T20 | LBK-3-08-T20 | LGR-3-08-T20 | LNC-3-08-T20 |
| LCL-3-10-T20 | LBK-3-10-T20 | LGR-3-10-T20 | LNC-3-10-T20 |
| LCL-3-12-T20 | LBK-3-12-T20 | LGR-3-12-T20 | LNC-3-12-T20 |
| LCL-3-06-T28 | LBK-3-06-T28 | LGR-3-06-T28 | LNC-3-06-T28 |
| LCL-3-08-T28 | LBK-3-08-T28 | LGR-3-08-T28 | LNC-3-08-T28 |
| LCL-3-10-T28 | LBK-3-10-T28 | LGR-3-10-T28 | LNC-3-10-T28 |
| LCL-3-12-T28 | LBK-3-12-T28 | LGR-3-12-T28 | LNC-3-12-T28 |
| LCL-1-06-T20 | LBK-1-06-T20 | LGR-1-06-T20 | LNC-1-06-T20 |
| LCL-1-08-T20 | LBK-1-08-T20 | LGR-1-08-T20 | LNC-1-08-T20 |
| LCL-1-10-T20 | LBK-1-10-T20 | LGR-1-10-T20 | LNC-1-10-T20 |
| LCL-1-12-T20 | LBK-1-12-T20 | LGR-1-12-T20 | LNC-1-12-T20 |
| LCL-1-06-T28 | LBK-1-06-T28 | LGR-1-06-T28 | LNC-1-06-T28 |
| LCL-1-08-T28 | LBK-1-08-T28 | LGR-1-08-T28 | LNC-1-08-T28 |
| LCL-1-10-T28 | LBK-1-10-T28 | LGR-1-10-T28 | LNC-1-10-T28 |
| LCL-1-12-T28 | LBK-1-12-T28 | LGR-1-12-T28 | LNC-1-12-T28 |

STAINLESS STEEL SLEEVES

| Clear Part # | Black Part # | Green Part # | Uncovered Part # | Wire Diameter | Length | A |
|--------------|--------------|--------------|------------------|---------------|--------|-----|
| LCLC3-06T20 | LBKC3-06T20 | LGRC3-06T20 | LNCC3-06T20 | 3/64 | 6 | .20 |
| LCLC3-08T20 | LBKC3-08T20 | LGRC3-08T20 | LNCC3-08T20 | 3/64 | 8 | .20 |
| LCLC3-10T20 | LBKC3-10T20 | LGRC3-10T20 | LNCC3-10T20 | 3/64 | 10 | .20 |
| LCLC3-12T20 | LBKC3-12T20 | LGRC3-12T20 | LNCC3-12T20 | 3/64 | 12 | .20 |
| LCLC3-06T28 | LBKC3-06T28 | LGRC3-06T28 | LNCC3-06T28 | 3/64 | 6 | .28 |
| LCLC3-08T28 | LBKC3-08T28 | LGRC3-08T28 | LNCC3-08T28 | 3/64 | 8 | .28 |
| LCLC3-10T28 | LBKC3-10T28 | LGRC3-10T28 | LNCC3-10T28 | 3/64 | 10 | .28 |
| LCLC3-12T28 | LBKC3-12T28 | LGRC3-12T28 | LNCC3-12T28 | 3/64 | 12 | .28 |
| LCLC1-06T20 | LBKC1-06T20 | LGRC1-06T20 | LNCC1-06T20 | 1/16 | 6 | .20 |
| LCLC1-08T20 | LBKC1-08T20 | LGRC1-08T20 | LNCC1-08T20 | 1/16 | 8 | .20 |
| LCLC1-10T20 | LBKC1-10T20 | LGRC1-10T20 | LNCC1-10T20 | 1/16 | 10 | .20 |
| LCLC1-12T20 | LBKC1-12T20 | LGRC1-12T20 | LNCC1-12T20 | 1/16 | 12 | .20 |
| LCLC1-06T28 | LBKC1-06T28 | LGRC1-06T28 | LNCC1-06T28 | 1/16 | 6 | .28 |
| LCLC1-08T28 | LBKC1-08T28 | LGRC1-08T28 | LNCC1-08T28 | 1/16 | 8 | .28 |
| LCLC1-10T28 | LBKC1-10T28 | LGRC1-10T28 | LNCC1-10T28 | 1/16 | 10 | .28 |
| LCLC1-12T28 | LBKC1-12T28 | LGRC1-12T28 | LNCC1-12T28 | 1/16 | 12 | .28 |

Loop / Eyelet



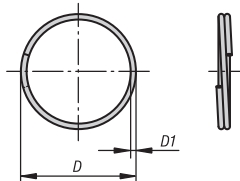
ZINC PLATED COPPER SLEEVES

| Clear Part # | Black Part # | Green Part # | Uncovered Part # |
|--------------|--------------|--------------|------------------|
| LCL-3-06-E20 | LBK-3-06-E20 | LGR-3-06-E20 | LNC-3-06-E20 |
| LCL-3-08-E20 | LBK-3-08-E20 | LGR-3-08-E20 | LNC-3-08-E20 |
| LCL-3-10-E20 | LBK-3-10-E20 | LGR-3-10-E20 | LNC-3-10-E20 |
| LCL-3-12-E20 | LBK-3-12-E20 | LGR-3-12-E20 | LNC-3-12-E20 |
| LCL-1-06-E20 | LBK-1-06-E20 | LGR-1-06-E20 | LNC-1-06-E20 |
| LCL-1-08-E20 | LBK-1-08-E20 | LGR-1-08-E20 | LNC-1-08-E20 |
| LCL-1-10-E20 | LBK-1-10-E20 | LGR-1-10-E20 | LNC-1-10-E20 |
| LCL-1-12-E20 | LBK-1-12-E20 | LGR-1-12-E20 | LNC-1-12-E20 |

STAINLESS STEEL SLEEVES

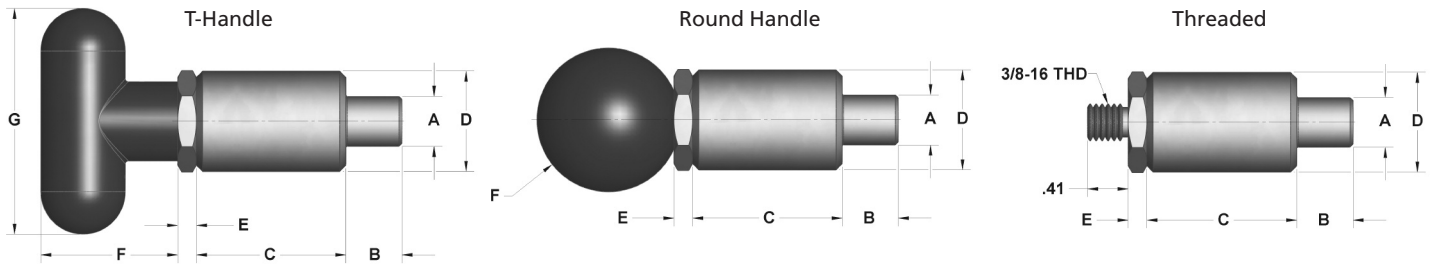
| Clear Part # | Black Part # | Green Part # | Uncovered Part # | Wire Diameter | Length | A | B |
|--------------|--------------|--------------|------------------|---------------|--------|-----|-----|
| LCLC3-06E20 | LBKC3-06E20 | LGRC3-06E20 | LNCC3-06E20 | 3/64 | 6 | .33 | .04 |
| LCLC3-08E20 | LBKC3-08E20 | LGRC3-08E20 | LNCC3-08E20 | 3/64 | 8 | .33 | .04 |
| LCLC3-10E20 | LBKC3-10E20 | LGRC3-10E20 | LNCC3-10E20 | 3/64 | 10 | .33 | .04 |
| LCLC3-12E20 | LBKC3-12E20 | LGRC3-12E20 | LNCC3-12E20 | 3/64 | 12 | .33 | .04 |
| LCLC1-06E20 | LBKC1-06E20 | LGRC1-06E20 | LNCC1-06E20 | 1/16 | 6 | .41 | .06 |
| LCLC1-08E20 | LBKC1-08E20 | LGRC1-08E20 | LNCC1-08E20 | 1/16 | 8 | .41 | .06 |
| LCLC1-10E20 | LBKC1-10E20 | LGRC1-10E20 | LNCC1-10E20 | 1/16 | 10 | .41 | .06 |
| LCLC1-12E20 | LBKC1-12E20 | LGRC1-12E20 | LNCC1-12E20 | 1/16 | 12 | .41 | .06 |

Split Rings



Used for attaching ball lock pins to a lanyard. Prevents the pin from being lost when not in use. Made from 302 stainless steel.

| Part # | D | D1 |
|--------|------|------|
| RSC-37 | .962 | .072 |



These spring loaded pull pins allow you to quickly retract and engage the plunger for locating, fastening and quick change operations. They consist of two parts which include a housing (barrel) and a plunger assembly. The plunger assembly screws into the housing. The housing is designed to be welded into place for strength. Pulling on the handle of the plunger assembly retracts the plunger into the housing. Releasing the handle allows the spring loaded plunger to extend. The lockout style allows you to pull and rotate the handle 1/4 turn to hold the plunger in the retracted position. The style without handles feature a 3/8-16 threaded end so the user can add a different handle or other method of actuation. The zinc plated steel plunger assemblies are made from C1038 steel on all sizes except the 5/8 which is made from 12L15 steel. The steel housing is made from 12L15 steel for welding to the fixture and is not plated. The aluminum housings are made from 6061-T6. The stainless steel models (plunger assembly and housing) are made from 303 stainless steel. Pull up force is approximately 5 lbs. Handles are made from black plastic.

T-Handle - Non-Locking

| Steel Plunger Steel Housing Part # | Steel Plunger Alum Housing Part # | SS Plunger SS Housing Part # | +.002 -.004 | | | +.000 -.005 | | | | |
|------------------------------------------|-----------------------------------------|------------------------------------|----------------|------|-------|----------------|------|--------|-------|--|
| | | | A | B | C | D | E | F | G | |
| CP-K25T | CP-K25TAL | — | 1/4 | 9/16 | 1-1/2 | 1.000 | 3/16 | 1-7/16 | 2-1/4 | |
| CP-K100T | CP-K100TAL | CP-K100TSS | 3/8 | 9/16 | 1-1/2 | 1.000 | 3/16 | 1-7/16 | 2-1/4 | |
| CP-K200T | CP-K200TAL | CP-K200TSS | 1/2 | 9/16 | 1-1/2 | 1.000 | 3/16 | 1-7/16 | 2-1/4 | |
| CP-K320T | CP-K320TAL | CP-K320TSS | 1/2 | 9/16 | 2-1/4 | 1.000 | 3/16 | 1-7/16 | 2-1/4 | |
| CP-K420T | CP-K420TAL | — | 5/8 | 9/16 | 2-1/4 | 1.000 | 3/16 | 1-7/16 | 2-1/4 | |

T-Handle - With Lockout

| Steel Plunger Steel Housing Part # | Steel Plunger Alum Housing Part # | SS Plunger SS Housing Part # | +.002 -.004 | | | +.000 -.005 | | | | |
|------------------------------------------|-----------------------------------------|------------------------------------|----------------|------|-------|----------------|------|--------|-------|--|
| | | | A | B | C | D | E | F | G | |
| CP-K25TLO | CP-K25TLOAL | — | 1/4 | 9/16 | 1-1/2 | 1.000 | 3/16 | 1-7/16 | 2-1/4 | |
| CP-K100TLO | CP-K100TLOAL | CP-K100TLOSS | 3/8 | 9/16 | 1-1/2 | 1.000 | 3/16 | 1-7/16 | 2-1/4 | |
| CP-K200TLO | CP-K200TLOAL | CP-K200TLOSS | 1/2 | 9/16 | 1-1/2 | 1.000 | 3/16 | 1-7/16 | 2-1/4 | |
| CP-K320TLO | CP-K320TLOAL | CP-K320TLOSS | 1/2 | 9/16 | 2-1/4 | 1.000 | 3/16 | 1-7/16 | 2-1/4 | |
| CP-K420TLO | CP-K420TLOAL | — | 5/8 | 9/16 | 2-1/4 | 1.000 | 3/16 | 1-7/16 | 2-1/4 | |

Round Handle - Non-Locking

| Steel Plunger Steel Housing Part # | Steel Plunger Alum Housing Part # | SS Plunger SS Housing Part # | +.002 -.004 | | | +.000 -.005 | | | | |
|------------------------------------------|-----------------------------------------|------------------------------------|----------------|------|-------|----------------|------|-------|--|--|
| | | | A | B | C | D | E | F | | |
| CP-K25R | CP-K25RAL | — | 1/4 | 9/16 | 1-1/2 | 1.000 | 3/16 | 1-3/8 | | |
| CP-K100R | CP-K100RAL | CP-K100RSS | 3/8 | 9/16 | 1-1/2 | 1.000 | 3/16 | 1-3/8 | | |
| CP-K200R | CP-K200RAL | CP-K200RSS | 1/2 | 9/16 | 1-1/2 | 1.000 | 3/16 | 1-3/8 | | |
| CP-K320R | CP-K320RAL | CP-K320RSS | 1/2 | 9/16 | 2-1/4 | 1.000 | 3/16 | 1-3/8 | | |
| CP-K420R | CP-K420RAL | — | 5/8 | 9/16 | 2-1/4 | 1.000 | 3/16 | 1-3/8 | | |

Round Handle - With Lockout

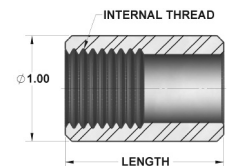
| Steel Plunger Steel Housing Part # | Steel Plunger Alum Housing Part # | SS Plunger SS Housing Part # | +.002 -.004 | | | +.000 -.005 | | | | |
|------------------------------------------|-----------------------------------------|------------------------------------|----------------|------|-------|----------------|------|-------|--|--|
| | | | A | B | C | D | E | F | | |
| CP-K25RLO | CP-K25RLOAL | — | 1/4 | 9/16 | 1-1/2 | 1.000 | 3/16 | 1-3/8 | | |
| CP-K100RLO | CP-K100RLOAL | CP-K100RLOSS | 3/8 | 9/16 | 1-1/2 | 1.000 | 3/16 | 1-3/8 | | |
| CP-K200RLO | CP-K200RLOAL | CP-K200RLOSS | 1/2 | 9/16 | 1-1/2 | 1.000 | 3/16 | 1-3/8 | | |
| CP-K320RLO | CP-K320RLOAL | CP-K320RLOSS | 1/2 | 9/16 | 2-1/4 | 1.000 | 3/16 | 1-3/8 | | |
| CP-K420RLO | CP-K420RLOAL | — | 5/8 | 9/16 | 2-1/4 | 1.000 | 3/16 | 1-3/8 | | |

Threaded End - Non-Locking

| Steel Plunger Steel Housing Part # | Steel Plunger Alum Housing Part # | SS Plunger SS Housing Part # | +.002 -.004 | | | +.000 -.005 | | | | |
|------------------------------------------|-----------------------------------------|------------------------------------|----------------|------|-------|----------------|------|--|--|--|
| | | | A | B | C | D | E | | | |
| CP-K25NK | CP-K25NKAL | — | 1/4 | 9/16 | 1-1/2 | 1.000 | 3/16 | | | |
| CP-K100NK | CP-K100NKAL | CP-K100NKSS | 3/8 | 9/16 | 1-1/2 | 1.000 | 3/16 | | | |
| CP-K200NK | CP-K200NKAL | CP-K200NKSS | 1/2 | 9/16 | 1-1/2 | 1.000 | 3/16 | | | |
| CP-K320NK | CP-K320NKAL | CP-K320NKSS | 1/2 | 9/16 | 2-1/4 | 1.000 | 3/16 | | | |
| CP-K420NK | CP-K420NKAL | — | 5/8 | 9/16 | 2-1/4 | 1.000 | 3/16 | | | |

Housings Only

| Steel Housing Part # | Alum Housing Part # | SS Housing Part # | Internal Thread Length | |
|-------------------------|------------------------|----------------------|------------------------|-------|
| CP-K102-BO | CP-K102AL-BO | CP-K102SS-BO | 3/4-10 | 1-1/2 |
| CP-K102L-BO | CP-K102LAL-BO | CP-K102LSS-BO | 3/4-10 | 2-1/4 |



Notes

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Doing business with Fairlane Products...

Purchasing From Fairlane Products

All items listed in this catalog are sold through a network of approved distributors. Original Equipment Manufacturers (OEM) may be able to purchase directly based on quantity, item and other criteria. Please call us at 586-294-6100 for assistance with any questions about purchasing or locating a distributor.

Business Hours

Representatives are available to assist you from 8:00 a.m. to 4:30 p.m. Eastern Time, Monday through Friday.

Pricing

OEM quantity price discounts are available for many items and apply to the quantity of each specific part. We do our best to hold pricing, however, any published prices are subject to change without notice. Quoted prices will be valid for 30 days.

Shipments

All items in this catalog are normally stocked. Backordered parts are always given a high priority and will ship as soon as they become available. For OEM customers, normal shipment is UPS – FOB Fraser, Michigan unless otherwise noted. Shipping charges are prepaid and added to the invoice. Special charges and guidelines apply to shipments outside the United States. Buyers are responsible for all applicable taxes and duties on international shipments.

Returns

An RGA number must be issued before returning any products. All returns must be shipped via UPS and reference the RGA number on the outside of the box. Custom products cannot be returned.

Custom Products

Some products may be modified to meet your exact specifications. Please inquire for pricing. Once custom made products are in process, the order may not be cancelled. Custom made products cannot be returned.

Material Data Safety Sheets

Material Data Safety Sheets are available upon request.

Specifications

We do our best to represent our products as accurately as possible in both our catalogs and website, however, all specifications are subject to change without notice.

Choice of Law

The terms of sale for purchases from Fairlane Products shall be governed by and construed in accordance with the laws of the State of Michigan as applied to contracts made and to be performed in Michigan. Any action arising out of such purchases must be brought in courts in Michigan. Purchasers consent to the jurisdiction of the courts in Michigan and to service of process by registered mail, return receipt requested, or by other manner proved by law.

Entire Agreement

By placement of an order or by acceptance of goods ordered, buyer signifies agreement that no terms, conditions or warranties other than those stated here, and no agreement or understanding, oral or written, in any way purporting to modify these terms, conditions and or warranties, whether contained in buyer's purchase order or elsewhere, shall be binding on Fairlane Products.

Customer Comments

Everyone at Fairlane Products takes great pride in their work and truly strives for complete customer satisfaction. If you ever have any comments or suggestions on our products, service, catalogs or website, please let us know. They are appreciated and taken seriously.