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CAI

Cable Art Incorporated

Architectural Products

- Cable Rail Components
- Swageless Fittings
- Architectural Rod Systems
- Trellis Systems
- Cable Solutions for Wood
- Stainless Steel Cable and Hardware
- Tools and Equipment

July 1, 2011

Cable Art Incorporated Architectural Products

Advantages of Swageless Fittings

Swaging is the term used for attaching fittings to the cable. Swageless fittings are installed on the cables by hand at the job site. With swageless fittings, at least one cable end does not contain a fitting when delivered to the job site. Fittings are larger than the diameter of the cable, so, since only bare cable is fed through intermediate elements between terminating end posts, holes in the intermediate elements can be drilled close to the diameter of the cable. Hence, there is a tighter fit between cable and frame than there would be if the cables were supplied with fittings on both ends.

With swageless fittings, the cables can be installed at the same time the railing frames are installed. There

is no waiting for exact measurements that would be required if the cables were supplied with fittings on both ends of the cable.

Swageless fittings are generally more costly than fittings that are swaged. However, on smaller projects, using swageless fittings often results in savings when the cost of renting or purchasing the equipment necessary to swage the fittings on site is considered.

Swageless fittings are offered for use with 1/8" and 3/16" cable, so they are not a choice for projects using larger diameter cables.

Advantages of Swaged Fittings

If fittings are swaged on site when the cables are installed, the intermediate elements between terminating end posts can be drilled close to the diameter of the cable, because there are no fittings to pass through the holes in the posts. There is a tighter fit of cable to frame than there would be with the larger holes required if fittings are swaged on both ends before the cables are strung through the posts.

An alternative to swaging on site (or using swageless fittings) is to have the fittings swaged on both ends of the cable by the factory. The disadvantages, however,

are that exact measurements must be supplied for the factory to swage the fittings onto the cable and, with fittings already attached to the cables, intermediate element holes need to be drilled oversize for the fittings to pass through for installation.

Swaging requires special equipment that can be purchased or rented from the factory. Swaged fittings are generally less expensive than swageless fittings, so on larger projects the savings in using swaged fittings may more than offset the cost of the equipment.

Front Cover

Stairway is constructed using 1-1/2" square tubular terminating posts, 3/4" x 1-1/2" rectangle tubular



Intermediate posts and 1" x 2" rectangle tubular top rail. Invisiware® receivers (page 11) are used at both ends of cable for stair runs and one end of level runs. Other end of cable for level runs are using Invisiware® radius ferrules (page 20).

LEED® Credit

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Building Codes

When used in accordance with factory recommendations for constructing the railing frame, spacing, and supporting the cables, a railing using CAI cable railing products will meet common infill loading requirements required by local building codes.









**Cable Art
Incorporated**

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Each section is color-coded.


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Key to Type and Material

The icons defined below will help you choose the fitting or hardware appropriate for your project.


Type of fitting

 **SWAGE** Fitting must be swaged


 **CRIMP** Fitting must be crimped with Handy Crimp Tool, page 36


 **GRIP** No special tools required

Material

 **316SS** Type 316 Stainless Steel

 **304SS** Type 304 Stainless Steel

 **18-8SS** Type 18-8 Stainless Steel

 **410SS** Type 410 Stainless Steel

 **STEEL** Carbon Steel

Catalog items and specifications are subject to change without notice. Items are not always as pictured.

Push-Lock™ Fittings

NON-TENSIONING END

Field-installed Push-Lock™ fittings require no swaging or special tools and can be used on angled or straight runs.

No field swaging

Push-Lock™ fittings are designed for use with 1x19 L.H. lay strand only. They can be used with any tensioning device on the other end... but when used with our swageless tensioners (pages 4-7) both ends can be put on the cable by hand without any swaging or special tools.

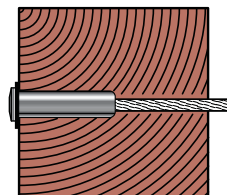
Easy to install

You can order your cables with a tensioner already on one end or you can install a tensioner on one end on site. Attach the tensioner on one end of post then cut the cable to length. Slip the Push-Lock™ fitting into the other end post or, using the style with a threaded eye, mount it to a tab on the outside of the post. Push the cable into the Push-Lock™ fitting, tension the cable, and you're done!

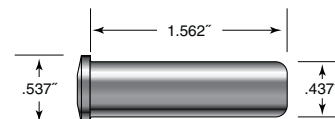
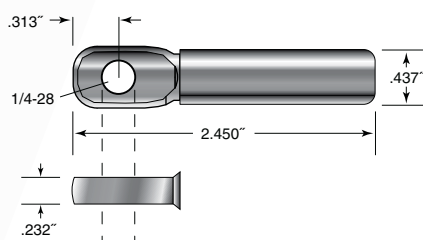
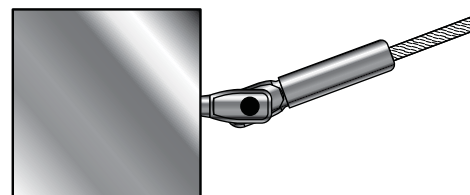


Two styles make your job easy – in metal or wood

Push-Lock™ fittings with rounded cap ends rest inside your metal or wood end posts on level runs. The fitting is hidden inside the post, with only the head exposed on the outside of the post.



Push-Lock™ fittings with threaded eyes mount to lag eyes, tabs or holes on the outside of your metal or wood post for use on stairs and severe pitches.



Push-Lock™ fittings are made of type 316 stainless steel with the exception of internal components that are made of other types of stainless steel. DESIGNED FOR USE WITH 1X19 L.H. LAY STRAND ONLY

GRIP 316SS

PUSH-LOCK™

| CABLE DIA. | | FRAME OPTIONS | | USE WITH SCREW NO. | FOR WOOD, USE WITH | | FOR METAL RAILINGS, USE WITH MOUNTING TAB NO. |
|------------|---------------|----------------------------|--------------|--------------------|--------------------|-------------|---|
| | | 1-1/2" TUBE or 1-1/4" PIPE | OTHER FRAMES | | WASHER NO. | LAG EYE NO. | |
| 1/8" | For flat runs | 20FPL4-12* | 20FPL4 | NA | 11HW14 | NA | NA |
| | For stairs | 20FPLTE4 | 20FPLTE4 | 11HBS8 | NA | 20HLE4 | See page 28 in this catalog |

*For appearance, ends are flat (rather than rounded) or use with 1-1/2" tubes and 1-1/4" pipe.

Pull-Lock™ Fittings

NON-TENSIONING END

Field installed Pull-Lock™ fittings make installing cables easy.

No field swaging

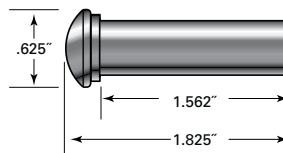
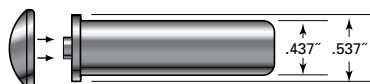
Pull-Lock™ fittings are designed for use with 1x19 L.H. lay strand only. They can be used with any tensioning device on the other end...but when used with our swageless tensioners both ends can be put on the cable by hand without any swaging or special tools.

Easy to install

You can order your cables with a tensioner already on one end or you can install a tensioner on one end on site. Attach the tensioner on one end post, slip the Pull-Lock™ fitting into the other end post and pull the cable all the way through the Pull-Lock™ fitting. Tension the cables, then cut the excess cable off on the back side of the fitting with a 4" right angle grinder or a cut-off tool (page 36) that is used with your hand drill. Press on the stainless steel cap to cover the bare cable end, and you're done!

Use with metal or wood posts

Pull-Lock™ fittings are used with pipe and with round, square, or rectangular metal tubing. When used with an end post 1-1/2" or more in thickness, the Pull-Lock™ fitting is hidden inside the end post, with only the head exposed on the outside of the post. Pipe ends are counterbored, so the full perimeter of the screw cap head rests on a flat surface in the pipe. The head rests on the outside wall of a flat-sided metal post. A plastic washer is included and acts as a scratch-resistant barrier between the screw cap head and the metal post. For wood applications, also order Stainless Steel Washer, Part No. 11HW14 (page 31).



Pull-Lock™ fittings are made of type 316 stainless steel with the exception of internal components that are made of other types of stainless steel.

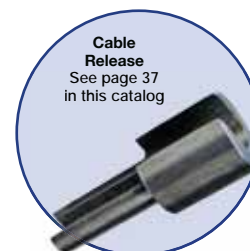
DESIGNED FOR USE WITH
1X19 L.H. LAY STRAND ONLY

GRIP 316SS

| CABLE DIA. | FRAME OPTIONS | | FOR WOOD, ALSO USE S.S. WASHER PART NO. |
|------------|----------------------------|--------------|---|
| | 1-1/2" TUBE or 1-1/4" PIPE | OTHER FRAMES | |
| 1/8" | 20FPUL4-12* | 20FPUL-4 | 11HW14 |

*For appearance, ends are flat (rather than rounded) for use with 1-1/2" tubes and 1-1/4" pipe.

Illustrated with Receiver with Push-Lock Stud on other end (see page 4).



Receivers with Push-Lock™ Stud

TENSIONER

Field installed Push-Lock™ studs require no swaging or special tools.



No field swaging

Similar to our Invisiware® receivers (see page 11), but when used with Push-Lock™ studs there is no need to swage the threaded stud onto the cable. Receivers with Push-Lock™ swageless studs can be used with any fitting on the other end, but when used with our other swageless fittings, both ends can be put on the cable by hand without any swaging or special tools.

Easy to install

Push-Lock™ studs are designed for use with 1x19 L.H. lay strand only. Push the cable into the Push-Lock™ swageless stud, where it will be securely held inside the fitting. The receiver is female-threaded to accept the male-threaded end of the fitting. The head of the receiver is broached for an Allen wrench. To tension the cable, use an Allen wrench to rotate the receiver around the threaded end of the stud.



Illustrated with Push-Lock (non-tensioning) fitting on other end (see page 2).

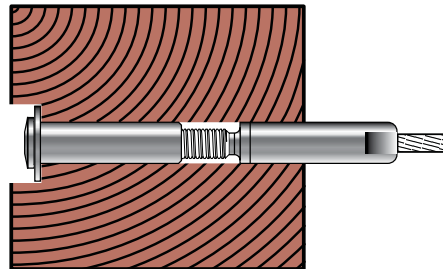
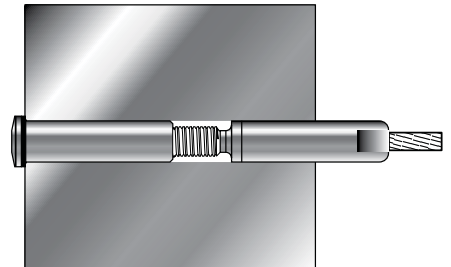
RECEIVER

PUSH-LOCK™ STUD



Use with metal or wood posts

The receiver with Push-Lock™ stud rests inside your metal or wood end post.

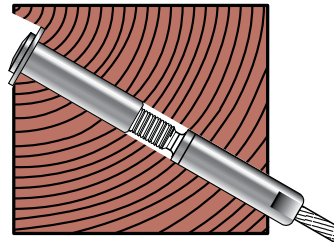
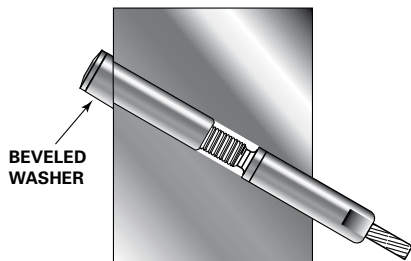


For use in wood, the fitting can rest against the outside of the end post or the post can be counterbored with the fitting recessed in the post. For wood applications, a larger diameter washer is needed to distribute the load over a wider surface. See Stainless Steel Washer, Part No. 11HW14 (page 31).

For stairs or severe pitches

With wood posts, you need to counterbore a 1" diameter hole at an angle, to accept the over-sized stainless steel washer that distributes the load over a wider surface than is required with a metal post.

Special stainless steel beveled washers let you use Push-Lock™ tensioners on stairs or severe pitches with flat-sided metal posts. (Not offered for pipe or round tubing.)



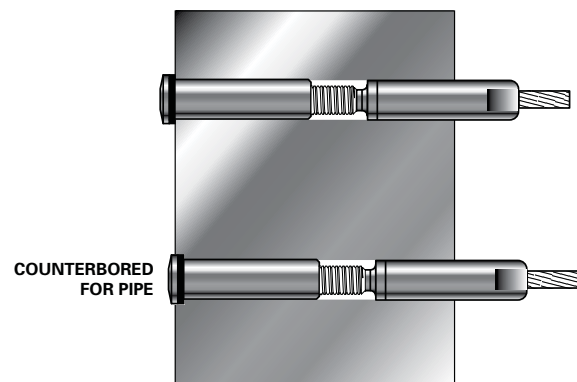
STAINLESS STEEL
BEVELED WASHERS

304SS

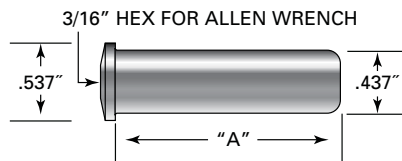
| FOR PITCH OF | ORDER PART NO. |
|--------------|----------------|
| 30° - 33° | 20HAW1432 |
| 34° - 36° | 20HAW1435 |
| 37° - 39° | 20HAW1438 |

For level runs

Receivers with Push-Lock™ studs rest in a hole inside the end post. Pipe ends are counterbored, so the full perimeter of the screw cap head rests on a flat surface in the pipe. The head rests on the outside wall of a flat-sided metal post. A plastic washer is included and acts as a scratch-resistant barrier between the screw cap head and the metal post. For wood applications, a larger diameter washer is needed to distribute the load over a wider surface. For wood, also order a Stainless Steel Washer, Part No. 11HW14 (page 31).



Receiver



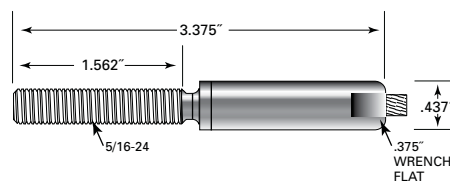
PART NUMBERS IN BOLD TYPE
ORDER SWAGELESS STUD SEPARATELY

GRIP 316SS

| RECEIVER | | A = LENGTH OF RECEIVER BODY | | | | | | | |
|------------|-----------------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|
| CABLE DIA. | USE WITH SWAGELESS STUD NO. | 1.562" | 1.812" | 2.030" | 2.301" | 2.375" | 2.530" | 3.030" | 3.5625" |
| 1/8" | 20FPLST4 | 20F4012 | 20F4022 | 20F4032 | 20F4042 | 20F4072 | 20F4082 | 20F4052 | 20F4062 |

Push-Lock™ Swageless Stud

The Push-Lock™ swageless stud is installed onto the end of the cable by hand, by pushing the cable into the fitting where it is held securely inside. No swaging is required, and, other than a cable cutter, no special tools are needed.



Push-Lock™ swageless studs are made of type 316 stainless steel with the exception of internal components that are made of other types of stainless steel. DESIGNED FOR USE WITH 1X19 L.H. LAY STRAND ONLY

| CABLE DIA. | PART NO. |
|------------|----------|
| 1/8" | 20FPLST4 |

GRIP 316SS

Handy Grip Systems

TENSIONERS

Simple and clean. Easy to install. No field swaging.

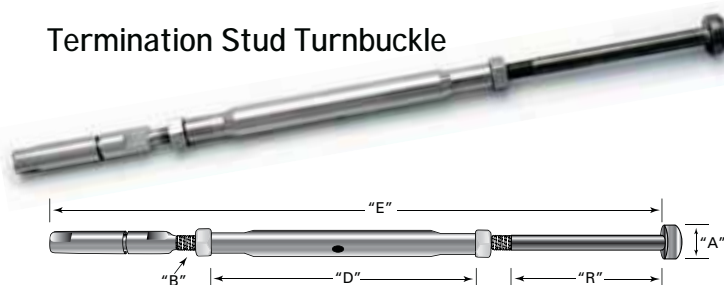
Similar to the machine swage and Handy Crimp style cable systems, this design revolves around being a high-strength, yet compact, solution for swageless cable terminations. Additionally, this system was designed to minimize the amount of the new hardware components required, sharing the majority of end fitting choices with its "swage type" counterparts.

The Handy Grip is offered for 1x19 and 7x7 cable strand configurations in both 1/8" and 3/16" cable diameters. Our hardware is made from high quality 316 grade stainless steel for superior corrosion resistance.

Visit our Website for assembly instructions.



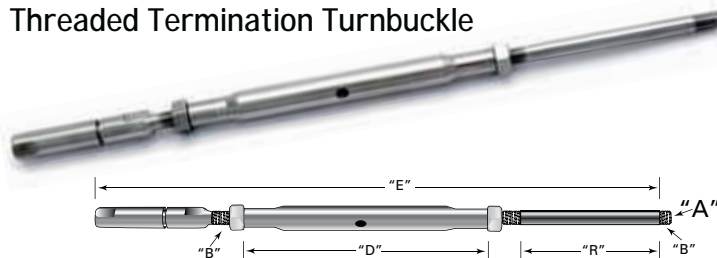
Termination Stud Turnbuckle



TERMINATION STUD TURNBUCKLE

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED | "A" CAP SIZE | "R" ROD LENGTH |
|------------|----------|------------|----------|---------|------------|--------------|----------------|
| 1/8" | 10A40150 | 1/4-28 | 4.250" | 10.250" | 8.250" | .5625" | 1.250" |
| 1/8" | 10A40152 | 1/4-28 | 4.250" | 11.250" | 9.250" | .5625" | 2.250" |
| 1/8" | 10A40154 | 1/4-28 | 4.250" | 13.250" | 11.250" | .5625" | 4.250" |
| 1/8" | 10A40156 | 1/4-28 | 4.250" | 15.250" | 13.250" | .5625" | 6.250" |
| 3/16" | 10A60150 | 1/4-28 | 4.250" | 10.250" | 8.250" | .5625" | 1.250" |
| 3/16" | 10A60152 | 1/4-28 | 4.250" | 11.250" | 9.250" | .5625" | 2.250" |
| 3/16" | 10A60154 | 1/4-28 | 4.250" | 13.250" | 11.250" | .5625" | 4.250" |
| 3/16" | 10A60156 | 1/4-28 | 4.250" | 15.250" | 13.250" | .5625" | 6.250" |

Threaded Termination Turnbuckle

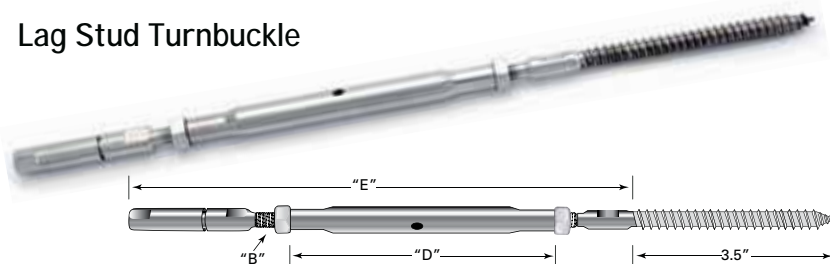


THREADED TERMINATION TURNBUCKLE

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED | "R" ROD LENGTH |
|------------|----------|------------|----------|---------|------------|----------------|
| 1/8" | 10A40550 | 1/4-28 | 4.250" | 10.250" | 8.250" | 1.250" |
| 1/8" | 10A40552 | 1/4-28 | 4.250" | 11.250" | 9.250" | 2.250" |
| 1/8" | 10A40554 | 1/4-28 | 4.250" | 13.250" | 11.250" | 4.250" |
| 1/8" | 10A40556 | 1/4-28 | 4.250" | 15.250" | 13.250" | 6.250" |
| 3/16" | 10A60550 | 1/4-28 | 4.250" | 10.250" | 8.250" | 1.250" |
| 3/16" | 10A60552 | 1/4-28 | 4.250" | 11.250" | 9.250" | 2.250" |
| 3/16" | 10A60554 | 1/4-28 | 4.250" | 13.250" | 11.250" | 4.250" |
| 3/16" | 10A60556 | 1/4-28 | 4.250" | 15.250" | 13.250" | 6.250" |

"A" See End Fitting Options, pages 30-31.

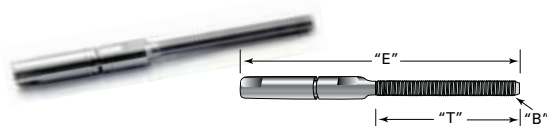
Lag Stud Turnbuckle



LAG STUD TURNBUCKLE

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED |
|------------|----------|------------|----------|--------|------------|
| 1/8" | 10A40652 | 1/4-28 | 4.250" | 8.750" | 6.750" |
| 3/16" | 10A60652 | 1/4-28 | 4.250" | 8.750" | 6.750" |

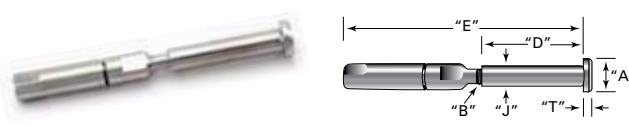
Threaded Stud



THREADED STUD

| CABLE DIA. | PART NO. | "B" THREAD | "E" LENGTH | "T" THREAD LENGTH |
|------------|----------|------------|------------|-------------------|
| 1/8" | 10T40854 | 1/4-28 LH | 4.375" | 2.250" |
| 1/8" | 10T40855 | 1/4-28 RH | 4.375" | 2.250" |
| 3/16" | 10T60854 | 1/4-28 LH | 4.375" | 2.250" |
| 3/16" | 10T60855 | 1/4-28 RH | 4.375" | 2.250" |

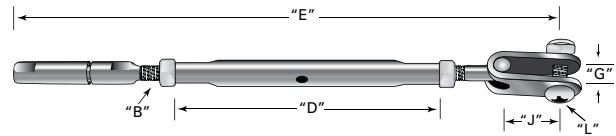
Stud Tensioning System



STUD TENSIONING SYSTEM

| CABLE DIA. | PART NO. | "B" THREAD | "D" BARREL | OPEN | "E" CLOSED | "J" BARREL DIA. | "A" CAP SIZE | "T" CAP THICKNESS |
|------------|------------|------------|------------|--------|------------|-----------------|--------------|-------------------|
| 1/8" | 10AST40850 | 1/4-28 | .563" | 3.375" | 3.375" | .313" | .500" | .125" |
| 1/8" | 10AST40852 | 1/4-28 | 1.500" | 4.250" | 3.375" | .313" | .500" | .125" |
| 3/16" | 10AST61050 | 5/16-24 | .563" | 3.375" | 3.375" | .375" | .563" | .125" |
| 3/16" | 10AST61052 | 5/16-24 | 1.500" | 4.250" | 3.375" | .375" | .563" | .125" |

Toggle Jaw Turnbuckle

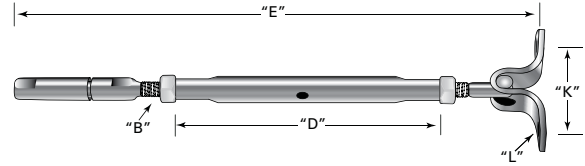


TOGGLE JAW TURNBUCKLE

GRIP 316SS

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | "E" OPEN | "E" CLOSED | "J" JAW DEPTH | "L" SCREW SIZE | "G" JAW WIDTH |
|------------|----------|------------|----------|----------|------------|---------------|----------------|---------------|
| 1/8" | 10A40252 | 1/4-28 | 4.250" | 10.625" | 8.625" | .688" | .250" | .250" |
| 3/16" | 10A60252 | 1/4-28 | 4.250" | 10.625" | 8.625" | .688" | .250" | .250" |

Deck Toggle Turnbuckle



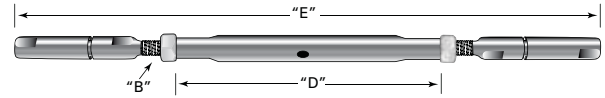
DECK TOGGLE TURNBUCKLE

GRIP 316SS

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | "E" OPEN | "E" CLOSED | "L" SCREW SIZE | "K" HOLE SPACING |
|------------|----------|------------|----------|----------|------------|----------------|------------------|
| 1/8" | 10A40452 | 1/4-28 | 4.250" | 10.250" | 8.250" | .250" | 1.500" |
| 3/16" | 10A60452 | 1/4-28 | 4.250" | 10.250" | 8.250" | .250" | 1.500" |

For Mounting Hardware, see page 32.

Handy Grip to Handy Grip Turnbuckle



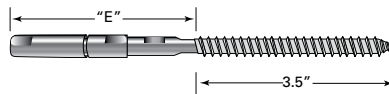
HANDY GRIP TO HANDY GRIP TURNBUCKLE

GRIP 316SS

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | "E" OPEN | "E" CLOSED |
|------------|----------|------------|----------|----------|------------|
| 1/8" | 10A40352 | 1/4-28 | 4.250" | 11.000" | 9.000" |
| 3/16" | 10A60352 | 1/4-28 | 4.250" | 11.000" | 9.000" |

NON-TENSIONING ENDS

Lag Stud

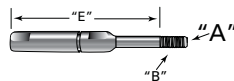


LAG STUD

GRIP 316SS

| CABLE DIA. | PART NO. | "E" LENGTH |
|------------|----------|------------|
| 1/8" | 10F40652 | 2.875" |
| 3/16" | 10F60652 | 2.875" |

Threaded Termination Stud



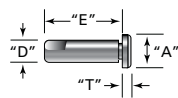
THREADED TERMINATION STUD

GRIP 316SS

| CABLE DIA. | PART NO. | "B" THREAD | "E" LENGTH |
|------------|------------|------------|------------|
| 1/8" | 10TST40853 | 1/4-28 | 2.750" |
| 3/16" | 10TST61053 | 5/16-24 | 2.750" |

"A" See End Fitting Options, pages 30-31.

Termination Stud

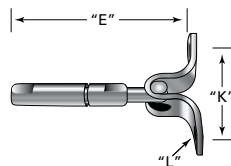


TERMINATION STUD

GRIP 316SS

| CABLE DIA. | PART NO. | "D" BODY O.D. | "E" LENGTH | "A" CAP SIZE | "T" CAP THICKNESS |
|------------|----------|---------------|------------|--------------|-------------------|
| 1/8" | 10F40152 | .375" | 1.250" | .563" | .120" |
| 3/16" | 10F60152 | .4375" | 1.250" | .625" | .120" |

Deck Toggle



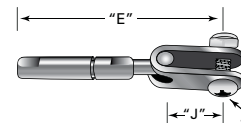
DECK TOGGLE

GRIP 316SS

| CABLE DIA. | PART NO. | "E" LENGTH | "L" SCREW SIZE | "K" HOLE SPACING |
|------------|----------|------------|----------------|------------------|
| 1/8" | 10F40452 | 2.750" | .688" | 1.50" |
| 3/16" | 10F60452 | 2.750" | .688" | 1.50" |

For Mounting Hardware, see page 32.

Toggle Jaw



TOGGLE JAW

GRIP 316SS

| CABLE DIA. | PART NO. | "E" LENGTH | "J" JAW DEPTH | "L" SCREW SIZE | "G" JAW WIDTH |
|------------|----------|------------|---------------|----------------|---------------|
| 1/8" | 10F40252 | 3.250" | .688" | .250" | .250" |
| 3/16" | 10F60252 | 3.250" | .688" | .250" | .250" |

Visit our Website for assembly instructions.



Residential railing and gate systems can be used in interior and exterior applications.



At left, a vertical cable railing and gate were used to meet pool enclosure codes.



Cable railing systems create a clean, professional look for commercial buildings.



Above is an example of a municipal use of cable railing systems.

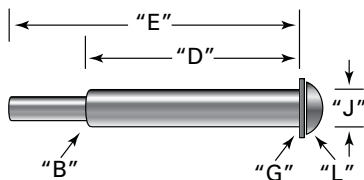


Top Hat System™



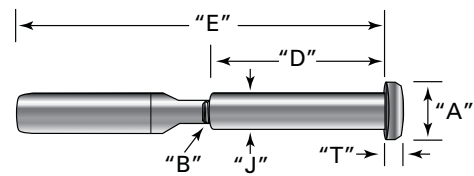
Top Hat Cable System™ achieves maximum cable railing adjustment when used on both ends. This method displays balance and symmetry in the finished cable railing product. No threads show, hardware is hidden.

For angle compensation options, see page 31.



| TOP HAT SYSTEM | | | | | | | | | | SWAGE 316SS |
|----------------|----------|------------|------------|----------|------------|-----------------|----------------|------------------|--|-------------|
| CABLE DIA. | PART NO. | "B" THREAD | "D" BARREL | "E" OPEN | "E" CLOSED | "J" BARREL DIA. | "L" SCREW SIZE | "G" WASHER | | |
| 1/8" | 40A40102 | 6 mm. | 2.250" | 3.375" | 2.750" | .363" | 5/16-18 | 3/8" (5/8" OD) | | |
| 1/8" | 40A40104 | 6 mm. | 3.250" | 4.250" | 3.375" | .363" | 5/16-18 | 3/8" (5/8" OD) | | |
| 3/16" | 40A60102 | 6 mm. | 2.250" | 3.625" | 3.000" | .363" | 5/16-18 | 3/8" (5/8" OD) | | |
| 3/16" | 40A60104 | 6 mm. | 3.250" | 4.438" | 3.563" | .363" | 5/16-18 | 3/8" (5/8" OD) | | |
| 3/16" | 40A60106 | 6 mm. | 4.250" | 5.375" | 4.250" | .363" | 5/16-18 | 3/8" (5/8" OD) | | |
| 1/4" | 40A80102 | 5/16-18 | 2.875" | 4.375" | 3.750" | .484" | 3/8-16 | 1/2" (7/8" OD) | | |
| 1/4" | 40A80104 | 5/16-18 | 3.375" | 4.813" | 3.938" | .484" | 3/8-16 | 1/2" (7/8" OD) | | |
| 1/4" | 40A80106 | 5/16-18 | 4.500" | 5.625" | 4.500" | .484" | 3/8-16 | 1/2" (7/8" OD) | | |
| 3/8" | 40A12102 | 3/8-16 | 4.250" | 6.375" | 5.500" | .664" | 1/2-13 | 1 1/16" (1" OD) | | |
| 1/2" | 40A16102 | 1/2-20 | 5.313" | 8.125" | 6.750" | .804" | 5/8-18 | 7/8" (1-1/2" OD) | | |

Stud Tensioning System



This simple and economical cable tensioning system provides for an extremely "clean" look concealing the threads for adjustment internally. The typical application is for short- to medium-length cable runs in wire sizes ranging from 1/8" to 1/4". Cable tensioning is easily accomplished with the use of a 3/16" hex key wrench (Allen wrench). All hardware is made from high quality 316 grade stainless steel for superior corrosion resistance.

Additionally, the stud tensioners can be used in conjunction with other stud length combinations and systems to meet your design criteria.

For angle compensation options, see page 31.



| STUD TENSIONING SYSTEM | | | | | | | | | | SWAGE 316SS |
|------------------------|------------|------------|------------|----------|------------|-----------------|--------------|-------------------|--|-------------|
| CABLE DIA. | PART NO. | "B" THREAD | "D" BARREL | "E" OPEN | "E" CLOSED | "J" BARREL DIA. | "A" CAP SIZE | "T" CAP THICKNESS | | |
| 1/8" | 10AST40800 | 1/4-28 | .563" | 2.500" | 2.500" | .313" | .500" | .125" | | |
| 1/8" | 10AST40802 | 1/4-28 | 1.500" | 3.375" | 2.625" | .313" | .500" | .125" | | |
| 5/32" | 10AST50800 | 1/4-28 | .563" | 2.875" | 2.875" | .313" | .500" | .125" | | |
| 5/32" | 10AST50802 | 1/4-28 | 1.500" | 3.750" | 3.000" | .313" | .500" | .125" | | |
| 5/32" | 10AST51000 | 5/16-24 | .563" | 3.063" | 3.063" | .375" | .563" | .125" | | |
| 5/32" | 10AST51002 | 5/16-24 | 1.500" | 3.750" | 3.000" | .375" | .563" | .125" | | |
| 3/16" | 10AST60800 | 1/4-28 | .563" | 2.813" | 2.813" | .313" | .500" | .125" | | |
| 3/16" | 10AST60802 | 1/4-28 | 1.500" | 3.813" | 3.000" | .313" | .500" | .125" | | |
| 3/16" | 10AST61000 | 5/16-24 | .563" | 2.875" | 2.875" | .375" | .563" | .125" | | |
| 3/16" | 10AST61002 | 5/16-24 | 1.500" | 3.813" | 3.000" | .375" | .563" | .125" | | |
| 1/4" | 10AST81000 | 5/16-24 | .563" | 3.500" | 3.500" | .375" | .563" | .125" | | |
| 1/4" | 10AST81002 | 5/16-24 | 1.500" | 4.375" | 3.625" | .375" | .563" | .125" | | |

| HANDY CRIMP* | | | | | | | | | | CRIMP 316SS |
|--------------|------------|------------|------------|----------|------------|-----------------|--------------|-------------------|--|-------------|
| CABLE DIA. | PART NO. | "B" THREAD | "D" BARREL | "E" OPEN | "E" CLOSED | "J" BARREL DIA. | "A" CAP SIZE | "T" CAP THICKNESS | | |
| 1/8" | 10AST40810 | 1/4-28 | .563" | 3.250" | 3.250" | .313" | .500" | .125" | | |
| 1/8" | 10AST40812 | 1/4-28 | 1.500" | 4.125" | 3.375" | .313" | .500" | .125" | | |
| 3/16" | 10AST60810 | 1/4-28 | .563" | 3.375" | 3.375" | .313" | .500" | .125" | | |
| 3/16" | 10AST60812 | 1/4-28 | 1.500" | 4.250" | 3.500" | .313" | .500" | .125" | | |
| 3/16" | 10AST61010 | 5/16-24 | .563" | 3.375" | 3.375" | .375" | .563" | .125" | | |
| 3/16" | 10AST61012 | 5/16-24 | 1.500" | 4.250" | 3.500" | .375" | .563" | .125" | | |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

Invisiware® Receivers

The tensioners that are hidden inside the post.

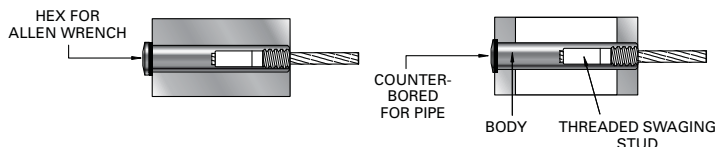
How it works.

Slide the Invisiware® receiver into a pre-drilled hole in the end post. The inside of the receiver is female-threaded to accept the male-threaded swaging stud (below) that is attached to the cable. The head of the receiver is broached for an Allen wrench. To tension the cable, simply insert the Allen wrench and rotate the receiver around the male threads to draw the stud and cable further inside the receiver. When installed, only the head of the Invisiware® receiver is exposed on the outside of the post.

Illustrated with an Invisiware® radius ferrule on the non-tensioning end (see page 20).

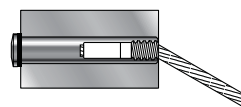
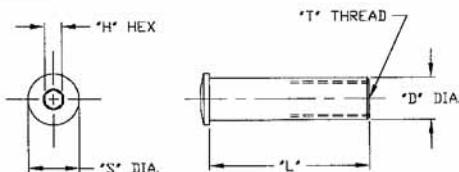
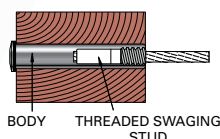
Use with metal or wood — on level runs or stairs

Invisiware® receivers are used with pipe and with round, square or rectangular metal tubing. Pipe ends are counterbored, so the full perimeter of the head rests on a flat surface in the pipe. The head rests on the outside wall of a flat-sided metal post. A plastic washer is included and acts as a scratch resistant barrier between the head of the receiver and the metal post.



For use in wood, the Invisiware® receiver can rest against the outside of the post or the post can be counterbored with the receiver recessed in the post. For wood applications, also order Stainless Steel Washer, Part No. 11HW14 (page 31).

You do not have to drill your holes at an angle to use Invisiware® receivers on stairs or severe pitches up to 35 degrees.



INVISIWARE® RECEIVER

PART NUMBERS IN BOLD TYPE
ORDER SWAGING STUD SEPARATELY

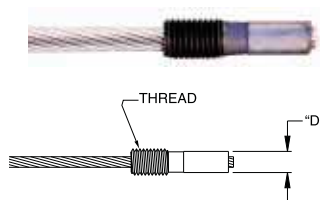
316SS

| CABLE DIA. | USE WITH SWAGING STUD NO. | "D" | "H" | "T" | "S" | FRAME OPTIONS | | | | | | | |
|------------|---------------------------|-------|-------|---------|-------|---------------------------------------|------------------------|-----------------------|--------------------|------------------------|------------------------|---------------------|--|
| | | | | | | 1-1/2" TUBE or 1-1/4" PIPE "L"=1.562" | 1-1/2" PIPE "L"=1.812" | 2"x2" TUBE "L"=2.030" | 2" PIPE "L"=2.301" | 2-3/8" TUBE "L"=2.375" | 2-1/2" TUBE "L"=2.530" | 3" TUBE* "L"=3.030" | 4x4 WOOD POST or 3-1/2" TUBE "L"=3.5625" |
| 1/8" | 20FS4 | .437" | 3/16" | 5/16-24 | .537" | 20F4012 | 20F4022 | 20F4032 | 20F4042 | 20F4072 | 20F4082 | 20F4052 | 20F4062 |
| 3/16" | 20FS6 | .437" | 3/16" | 5/16-24 | .537" | 20F4012 | 20F4022 | 20F4032 | 20F4042 | 20F4072 | 20F4082 | 20F4052 | 20F4062 |
| 1/4" | 20FS8 | .531" | 7/32" | 7/16-20 | .646" | N.A. | 20F8022 | 20F8032 | 20F8042 | N.A. | N.A. | 20F8052 | N.A. |
| 5/16" | 20FS10 | .687" | 5/16" | 9/16-18 | .865" | N.A. | N.A. | 20F1232 | 20F1242 | N.A. | N.A. | 20F1252 | N.A. |
| 3/8" | 20FS12 | .687" | 5/16" | 9/16-18 | .865" | N.A. | N.A. | 20F1232 | 20F1242 | N.A. | N.A. | 20F1252 | N.A. |

* Also use with 2"x1" and 3"x1" double end post construction, along with stainless steel spacers (page 33).
Order Receiver and Stud separately.

Invisiware® Threaded Swaging Stud

This part is swaged onto the end of the cable and used with the Invisiware® receiver (above). When used with the welded receiver (see page 28) in a metal end post, it becomes a stop-end (non-tensioning end) fitting that is completely hidden inside the end post. The threaded surface is coated with a baked-on molybdenum-based dry film lubricant, to prevent the threads from binding when tensioned and in extreme environments.



INVISIWARE® THREADED SWAGING STUD MOLY COATED

SWAGE 316SS

| CABLE DIA. | PART NO. | THREAD | "D" DIAMETER AFTER SWAGED |
|------------|---------------|---------|---------------------------|
| 1/8" | 20FS4 | 5/16-24 | .250" |
| 3/16" | 20FS6 | 5/16-24 | .250" |
| 1/4" | 20FS8 | 7/16-20 | .375" |
| 5/16" | 20FS10 | 9/16-18 | .500" |
| 3/8" | 20FS12 | 9/16-18 | .500" |

877.664.4224 • 661.257.7522 • Fax 661.257.7502

28210 Avenue Crocker, Suite 307 • Valencia, CA 91355

Email: sales@cableart.com • Website: www.cableart.com

**Cable Art
Incorporated**



Threaded Stud System

The most cost effective cable attachment and tensioning solution offers a very "clean" look. This system normally uses a flat washer and hex nut for tensioning against the end vertical posts in the run. A cap (acorn) nut is installed on the protruding threads to finish off the attachment and lock the tensioning nut in position.



THREADED STUD

SWAGE 316SS

| CABLE DIA. | PART. NO. | THREAD LENGTH | THREAD SIZE |
|------------|-----------|---------------|-------------|
| 1/8" | 10T40800 | .438" | 1/4-28 LH |
| 1/8" | 10T40801 | .438" | 1/4-28 RH |
| 1/8" | 10T40802 | 1.500" | 1/4-28 LH |
| 1/8" | 10T40803 | 1.500" | 1/4-28 RH |
| 1/8" | 10T40804 | 2.250" | 1/4-28 LH |
| 1/8" | 10T40805 | 2.250" | 1/4-28 RH |
| 1/8" | 10T40807 | 3.250" | 1/4-28 LH |
| 5/32" | 10T50801 | .438" | 1/4-28 RH |
| 5/32" | 10T50802 | 1.500" | 1/4-28 LH |
| 5/32" | 10T50803 | 1.500" | 1/4-28 RH |
| 5/32" | 10T50804 | 2.250" | 1/4-28 LH |
| 5/32" | 10T50805 | 2.250" | 1/4-28 RH |
| 5/32" | 10T50807 | 3.250" | 1/4-28 RH |
| 3/16" | 10T60801 | .438" | 1/4-28 RH |
| 3/16" | 10T60802 | 1.500" | 1/4-28 LH |
| 3/16" | 10T60803 | 1.500" | 1/4-28 RH |
| 3/16" | 10T60804 | 2.250" | 1/4-28 LH |
| 3/16" | 10T60805 | 2.250" | 1/4-28 RH |
| 3/16" | 10T60807 | 3.250" | 1/4-28 RH |
| 3/16" | 10T61000 | .438" | 5/16-24 LH |
| 3/16" | 10T61001 | .438" | 5/16-24 RH |
| 3/16" | 10T61002 | 1.500" | 5/16-24 LH |
| 3/16" | 10T61003 | 1.500" | 5/16-24 RH |
| 3/16" | 10T61004 | 2.375" | 5/16-24 LH |
| 3/16" | 10T61005 | 2.375" | 5/16-24 RH |
| 1/4" | 10T81000 | .438" | 5/16-24 LH |
| 1/4" | 10T81001 | .438" | 5/16-24 RH |
| 1/4" | 10T81002 | 1.500" | 5/16-24 LH |
| 1/4" | 10T81003 | 1.500" | 5/16-24 RH |
| 1/4" | 10T81004 | 2.375" | 5/16-24 LH |
| 1/4" | 10T81005 | 2.375" | 5/16-24 RH |
| 1/4" | 10T81200 | .438" | 3/8-24 LH |
| 1/4" | 10T81201 | .438" | 3/8-24 RH |
| 1/4" | 10T81202 | 1.500" | 3/8-24 LH |
| 1/4" | 10T81203 | 1.500" | 3/8-24 RH |
| 1/4" | 10T81204 | 2.750" | 3/8-24 LH |
| 1/4" | 10T81205 | 2.750" | 3/8-24 RH |
| 5/16" | 10T101603 | 3.000" | 1/2-20 RH |
| 3/8" | 10T121603 | 3.000" | 1/2-20 RH |

Larger sizes also available. Please call for details.

HANDY CRIMP*

CRIMP 316SS

| CABLE DIA. | PART. NO. | THREAD LENGTH | THREAD SIZE |
|------------|-----------|---------------|-------------|
| 1/8" | 10T40810 | .438" | 1/4-28 LH |
| 1/8" | 10T40811 | .438" | 1/4-28 RH |
| 1/8" | 10T40812 | 1.500" | 1/4-28 LH |
| 1/8" | 10T40813 | 1.500" | 1/4-28 RH |
| 1/8" | 10T40814 | 2.250" | 1/4-28 LH |
| 1/8" | 10T40815 | 2.250" | 1/4-28 RH |
| 3/16" | 10T60811 | .438" | 1/4-28 RH |
| 3/16" | 10T60812 | 1.500" | 1/4-28 LH |
| 3/16" | 10T60813 | 1.500" | 1/4-28 RH |
| 3/16" | 10T60814 | 2.250" | 1/4-28 LH |
| 3/16" | 10T60815 | 2.250" | 1/4-28 RH |
| 3/16" | 10T60817 | 3.250" | 1/4-28 RH |
| 3/16" | 10T61010 | .438" | 5/16-24 LH |
| 3/16" | 10T61011 | .438" | 5/16-24 RH |
| 3/16" | 10T61012 | 1.500" | 5/16-24 LH |
| 3/16" | 10T61013 | 1.500" | 5/16-24 RH |
| 3/16" | 10T61014 | 2.375" | 5/16-24 LH |
| 3/16" | 10T61015 | 2.375" | 5/16-24 RH |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

See pages 30-31 for hardware.

Visit our Website for installation instructions.

Adjust-A-Jaw® Tensioners

How it works.

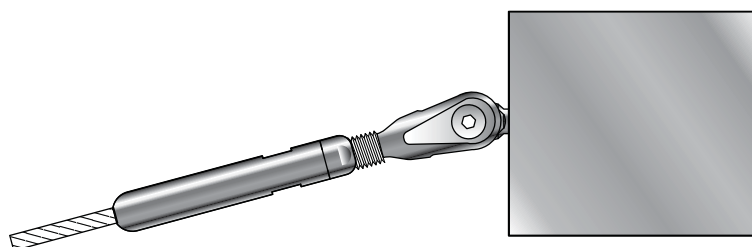
Use our fixed tabs or threaded tabs (page 28) or lag eyes (page 29) to mount Adjust-A-Jaw® tensioners to your end posts. Or you can mount them using flat bar or angle iron welded to your post with holes drilled to accept the clevis. See the tabulated drawing and chart below to determine how this fitting interfaces with your end post.

The clevis has a male thread that mates with the female thread within the body of the tensioner. The swaging ferrule is swaged onto the cable and holds the cable inside the body. The body rotates on the cable and provides a considerable amount of take-up during tensioning with an open-end wrench. After tensioning, the lock nut locks the assembly in place.

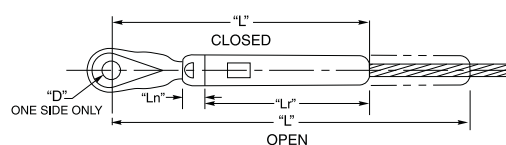
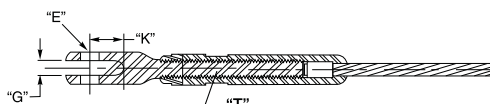


Use on level runs or stairs.

Adjust-A-Jaw® tensioners are precision machined, streamlined devices that are used where a high-tech look is desired, where you may wish to see hardware on your railing, or where you are unable to access the back of the end post.



Adjust-A-Jaw® tensioners have no sharp edges, no crevices to collect dust and dirt, or anything that will scratch or snag.



ADJUST-A-JAW®

SWAGE 316SS

| CABLE DIA. | PART NO. | USE WITH FERRULE NO.* | USE WITH SCREW NO.* | "E" THREAD | "T" | "G" | "K" | "L" CLOSED | "L" OPEN | "Ln" | "Lr" | "D" DIA. |
|------------|----------|-----------------------|---------------------|------------|------------|-------|------|------------|----------|-------|-------|----------|
| 1/8" | 20AAJ4 | 20FF4 | 11HBS8 | 1/4-28 | 5/16-24 LH | .260" | .56" | 4.30" | 5.99" | .375" | 2.75" | .260" |
| 3/16" | 20AAJ4 | 20FF6 | 11HBS8 | 1/4-28 | 5/16-24 LH | .260" | .56" | 4.30" | 5.99" | .375" | 2.75" | .260" |
| 1/4" | 20AAJ8 | 20FF8 | 11HBS12 | 3/8-24 | 7/16-20 LH | .313" | .75" | 4.87" | 6.43" | .500" | 3.00" | .390" |
| 5/16" | 20AAJ10 | 20FF10 | 11HBS12 | 3/8-24 | 9/16-18 RH | .348" | .87" | 6.74" | 9.28" | .620" | 4.50" | .390" |
| 3/8" | 20AAJ10 | 20FF12 | 11HBS12 | 3/8-24 | 9/16-18 LH | .348" | .87" | 6.74" | 9.28" | .620" | 4.50" | .390" |

*Order Ferrule and Screw separately.

Adjust-A-Body® Tensioners

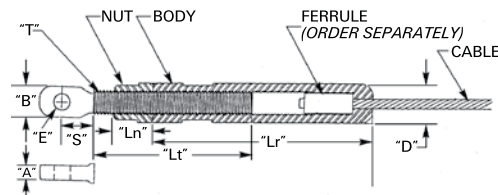
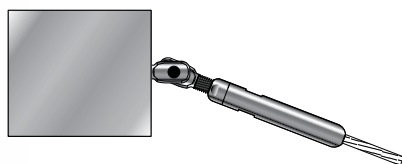
How it works.

The mounting end on each of our Adjust-A-Body® tensioners has a male thread that mates with the female thread within the body of the tensioner. The swaging ferrule is swaged onto the cable and holds the cable inside the body. The body rotates on the cable and provides a considerable amount of take-up during tensioning with an open-end wrench. After tensioning, the lock nut locks the assembly in place.



Adjust-A-Body® with Threaded Eye Tensioner

Used on angled or straight runs. You can use our fixed tabs or threaded tabs (page 28) or lag eyes (page 29), to mount this tensioner to your end posts. Or you can mount them using flat bar or angle iron welded to your post with drilled holes. See the tabulated drawing and chart below to determine how this fitting interfaces with your end post.



ADJUST-A-BODY® with THREADED EYE TENSIONER

SWAGE 316SS

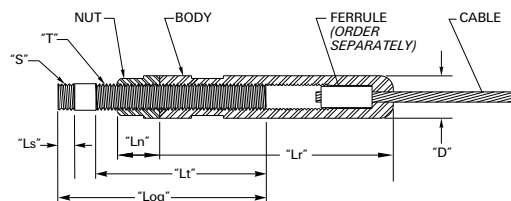
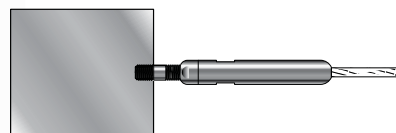
| CABLE DIA. | PART NO. | USE WITH FERRULE NO.* | USE WITH SCREW NO.* | "E" THREAD | "T" | "A" | "B" | "S" | "Lt" | "Ln" | "Lr" | "D" |
|------------|----------|-----------------------|---------------------|------------|------------|-------------|-------|------|-------|-------|-------|-------|
| 1/8" | 20ATE4 | 20FF4 | 11HBS8 | 1/4-28 | 5/16-24 LH | .233"/.229" | .500" | .44" | 2.00" | .375" | 2.75" | .500" |
| 3/16" | 20ATE4 | 20FF6 | 11HBS8 | 1/4-28 | 5/16-24 LH | .233"/.229" | .500" | .44" | 2.00" | .375" | 2.75" | .500" |
| 1/4" | 20ATE8 | 20FF8 | 11HBS12 | 3/8-24 | 7/16-20 LH | .295"/.285" | .844" | .68" | 2.50" | .500" | 3.00" | .625" |

*Order Ferrule and Screw separately.



Adjust-A-Body® with Threaded Bolt Tensioner

Used on straight runs, this tensioner screws into a drilled and tapped hole in your metal post. There is no need for special tees with holes, welded tabs, or any other mounting device. Recommended for level runs using a minimum schedule 80 pipe or square or rectangular steel tubing with a minimum .250" wall.



ADJUST-A-BODY® with THREADED BOLT TENSIONER

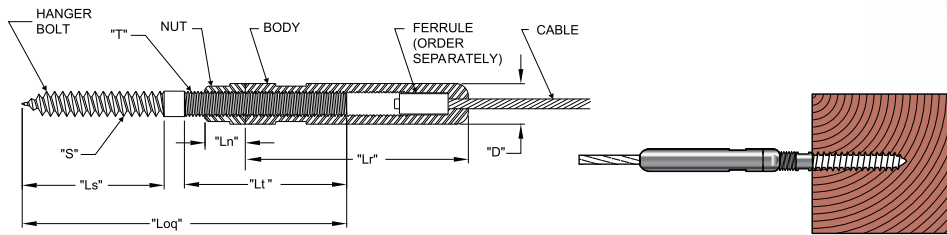
SWAGE 316SS

| CABLE DIA. | PART NO. | USE WITH FERRULE NO.* | "S" | "T" | "Ls" | "Lt" | "Loq" | "Ln" | "Lr" | "D" |
|------------|----------|-----------------------|---------|------------|-------|-------|--------|-------|-------|-------|
| 1/8" | 20ATB4 | 20FF4 | 5/16-24 | 5/16-24 LH | .375" | 2.00" | 2.625" | .375" | 2.75" | .500" |
| 3/16" | 20ATB4 | 20FF6 | 5/16-24 | 5/16-24 LH | .375" | 2.00" | 2.625" | .375" | 2.75" | .500" |
| 1/4" | 20ATB8 | 20FF8 | 5/16-24 | 7/16-20 LH | .375" | 2.50" | 3.125" | .500" | 3.00" | .625" |

*Order Ferrule separately.

Adjust-A-Body® with Hanger Bolt Tensioner

This tensioner screws right into your wooden end post. There is no need for special mounting hardware.



ADJUST-A-BODY® with HANGER BOLT TENSIONER

SWAGE 316SS

| CABLE DIA. | PART NO. | USE WITH FERRULE NO.* | "S" | "T" | "Ls" | "Lt" | "Loq" | "Ln" | "Lr" | "D" | DRILL SIZE REQUIRED | MIN. NOMINAL TIMBER SIZE |
|------------|----------|-----------------------|-------|------------|-------|-------|-------|-------|-------|-------|---------------------|--------------------------|
| 1/8" | 20ALB4 | 20FF4 | 5/16" | 5/16-24 LH | 1.50" | 2.00" | 3.75" | .375" | 2.75" | .500" | 15/64" | 4x4 |
| 3/16" | 20ALB4 | 20FF6 | 5/16" | 5/16-24 LH | 1.50" | 2.00" | 3.75" | .375" | 2.75" | .500" | 15/64" | |
| 1/4" | 20ALB8 | 20FF8 | 7/16" | 7/16-20 LH | 2.00" | 2.50" | 4.75" | .500" | 3.00" | .625" | 5/16" | |

*Order Ferrule separately.

Adjust-A-Body® with Extended Length Hanger Bolt Tensioner

Same as the above tensioner, except the hanger bolt is 3" long, allowing you to penetrate deeper into the post or wall if necessary. Offered for use with 1/8" and 3/16" cable.



ADJUST-A-BODY® with EXTENDED LENGTH HANGER BOLT TENSIONER

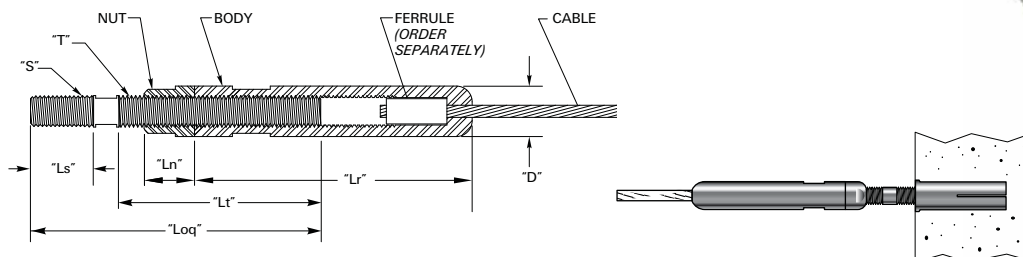
SWAGE 316SS

| CABLE DIA. | PART NO. | USE WITH FERRULE NO.* | "S" | "T" | "Ls" | "Lt" | "Loq" | "Ln" | "Lr" | "D" | DRILL SIZE REQUIRED | MIN. NOMINAL TIMBER SIZE |
|------------|----------|-----------------------|-------|------------|-------|-------|-------|-------|-------|-------|---------------------|--------------------------|
| 1/8" | 20AXLB4 | 20FF4 | 5/16" | 5/16-24 LH | 1.50" | 2.00" | 5.25" | .375" | 2.75" | .500" | 15/64" | 4x4 |
| 3/16" | 20AXLB4 | 20FF6 | 5/16" | 5/16-24 LH | 1.50" | 2.00" | 5.25" | .375" | 2.75" | .500" | 15/64" | |

*Order Ferrule separately.

Adjust-A-Body® with Concrete Anchor Bolt Tensioner

An easy, practical way to attach a tensioner to a concrete wall. The end screws into a concrete drop-in anchor (not included), see page 32.



ADJUST-A-BODY® with CONCRETE ANCHOR BOLT TENSIONER

SWAGE 316SS

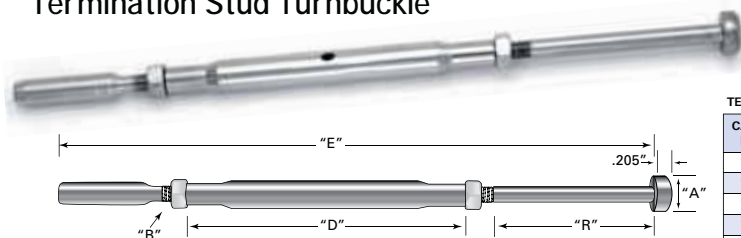
| CABLE DIA. | PART NO. | USE WITH FERRULE NO.* | "S" | "T" | "Ls" | "Lt" | "Loq" | "Ln" | "Lr" | "D" | USE WITH DROP-IN CONCRETE ANCHOR* STAINLESS CARBON STEEL | |
|------------|----------|-----------------------|--------|------------|--------|--------|--------|-------|-------|-------|---|----------|
| 1/8" | 20AAB4 | 20FF4 | 3/8-16 | 5/16-24 LH | .500" | 2.313" | 3.188" | .375" | 2.75" | .500" | 11HDAS12 | 11HDAC12 |
| 3/16" | 20AAB4 | 20FF6 | 3/8-16 | 5/16-24 LH | .500" | 2.313" | 3.188" | .375" | 2.75" | .500" | | |
| 1/4" | 20AAB8 | 20FF8 | 1/2-13 | 7/16-20 LH | 1.125" | 2.500" | 3.938" | .500" | 3.00" | .625" | 11HDAS16 | 11HDAC16 |

*Order Ferrule and Concrete Anchor separately.



Traditional Turnbuckles

Termination Stud Turnbuckle



TERMINATION STUD TURNBUCKLE
HANDY CRIMP*

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | "E" OPEN | "E" CLOSED | "A" CAP SIZE | "R" ROD LENGTH |
|------------|-----------|------------|----------|----------|------------|--------------|----------------|
| 1/8" | 10A40110S | 1/4-28 | 2.750" | 7.750" | 6.500" | .563" | 1.250" |
| 1/8" | 10A40110 | 1/4-28 | 4.250" | 10.000" | 8.000" | .563" | 1.250" |
| 1/8" | 10A40112S | 1/4-28 | 2.750" | 8.750" | 7.500" | .563" | 2.250" |
| 1/8" | 10A40112 | 1/4-28 | 4.250" | 11.000" | 9.000" | .563" | 2.250" |
| 1/8" | 10A40114 | 1/4-28 | 4.250" | 13.000" | 11.000" | .563" | 4.250" |
| 1/8" | 10A40116 | 1/4-28 | 4.250" | 15.000" | 13.000" | .563" | 6.250" |
| 3/16" | 10A60110S | 1/4-28 | 2.750" | 7.875" | 6.625" | .563" | 1.250" |
| 3/16" | 10A60110 | 1/4-28 | 4.250" | 10.625" | 8.625" | .563" | 1.250" |
| 3/16" | 10A60112S | 1/4-28 | 2.750" | 8.875" | 7.625" | .563" | 2.250" |
| 3/16" | 10A60112 | 1/4-28 | 4.250" | 11.125" | 9.125" | .563" | 2.250" |
| 3/16" | 10A60114 | 1/4-28 | 4.250" | 13.125" | 11.125" | .563" | 4.250" |
| 3/16" | 10A60116 | 1/4-28 | 4.250" | 15.125" | 13.125" | .563" | 6.250" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

This system supports any type of post with wire sizes ranging from 1/8" to 1/4". Termination Rods are available for up to 12" thick post configurations. In addition to new projects, the system is a choice for retrofitting existing rails to meet current codes.

TERMINATION STUD TURNBUCKLE

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED | "A" CAP SIZE | "R" ROD LENGTH |
|------------|-----------|------------|----------|---------|------------|--------------|----------------|
| 1/8" | 10A40100S | 1/4-28 | 2.750" | 7.000" | 5.750" | .563" | 1.250" |
| 1/8" | 10A40100 | 1/4-28 | 4.250" | 9.250" | 7.250" | .563" | 1.250" |
| 1/8" | 10A40102S | 1/4-28 | 2.750" | 8.000" | 6.750" | .563" | 2.250" |
| 1/8" | 10A40102 | 1/4-28 | 4.250" | 10.250" | 8.250" | .563" | 2.250" |
| 1/8" | 10A40104 | 1/4-28 | 4.250" | 12.250" | 10.250" | .563" | 4.250" |
| 1/8" | 10A40106 | 1/4-28 | 4.250" | 14.250" | 12.250" | .563" | 6.250" |
| 5/32" | 10A50100S | 1/4-28 | 2.750" | 7.500" | 6.250" | .563" | 1.250" |
| 5/32" | 10A50100 | 1/4-28 | 4.250" | 10.250" | 8.250" | .563" | 1.250" |
| 5/32" | 10A50102S | 1/4-28 | 2.750" | 8.500" | 7.250" | .563" | 2.250" |
| 5/32" | 10A50102 | 1/4-28 | 4.250" | 10.750" | 8.750" | .563" | 2.250" |
| 5/32" | 10A50104 | 1/4-28 | 4.250" | 12.750" | 10.750" | .563" | 4.250" |
| 5/32" | 10A50106 | 1/4-28 | 4.250" | 14.750" | 12.750" | .563" | 6.250" |
| 3/16" | 10A60100S | 1/4-28 | 2.750" | 7.500" | 6.250" | .563" | 1.250" |
| 3/16" | 10A60100 | 1/4-28 | 4.250" | 10.250" | 8.250" | .563" | 1.250" |
| 3/16" | 10A60102S | 1/4-28 | 2.750" | 8.500" | 7.250" | .563" | 2.250" |
| 3/16" | 10A60102 | 1/4-28 | 4.250" | 10.750" | 8.750" | .563" | 2.250" |
| 3/16" | 10A60104 | 1/4-28 | 4.250" | 12.750" | 10.750" | .563" | 4.250" |
| 3/16" | 10A60106 | 1/4-28 | 4.250" | 14.750" | 12.750" | .563" | 6.250" |
| 3/16" | 10A60108 | 5/16-24 | 4.750" | 11.250" | 9.250" | .563" | 2.250" |
| 1/4" | 10A80102 | 5/16-24 | 4.750" | 11.750" | 9.750" | .563" | 2.250" |

Threaded Termination Turnbuckle



THREADED TERMINATION STUD TURNBUCKLE
HANDY CRIMP*

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | "E" OPEN | "E" CLOSED | "R" ROD LENGTH |
|------------|-----------|------------|----------|----------|------------|----------------|
| 1/8" | 10A40510S | 1/4-28 | 2.750" | 7.750" | 6.500" | 1.250" |
| 1/8" | 10A40510 | 1/4-28 | 4.250" | 10.000" | 8.000" | 1.250" |
| 1/8" | 10A40512S | 1/4-28 | 2.750" | 8.750" | 7.500" | 2.250" |
| 1/8" | 10A40512 | 1/4-28 | 4.250" | 11.000" | 9.000" | 2.250" |
| 1/8" | 10A40514 | 1/4-28 | 4.250" | 13.000" | 11.000" | 4.250" |
| 1/8" | 10A40516 | 1/4-28 | 4.250" | 15.000" | 13.000" | 6.250" |
| 3/16" | 10A60510S | 1/4-28 | 2.750" | 7.875" | 6.625" | 1.250" |
| 3/16" | 10A60510 | 1/4-28 | 4.250" | 10.125" | 8.125" | 1.250" |
| 3/16" | 10A60512S | 1/4-28 | 2.750" | 8.875" | 7.625" | 2.250" |
| 3/16" | 10A60512 | 1/4-28 | 4.250" | 11.125" | 9.125" | 2.250" |
| 3/16" | 10A60514 | 1/4-28 | 4.250" | 13.125" | 11.125" | 4.250" |
| 3/16" | 10A60516 | 1/4-28 | 4.250" | 15.125" | 13.125" | 6.250" |

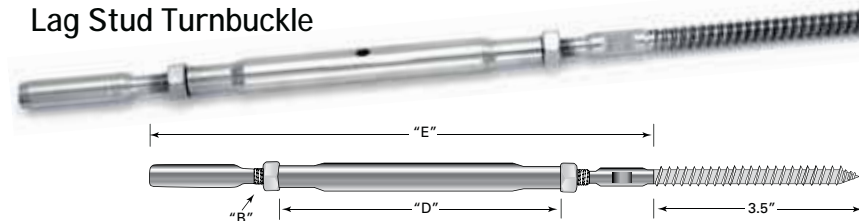
*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

THREADED TERMINATION STUD TURNBUCKLE

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED | "R" ROD LENGTH |
|------------|-----------|------------|----------|---------|------------|----------------|
| 1/8" | 10A40500S | 1/4-28 | 2.750" | 7.000" | 5.750" | 1.250" |
| 1/8" | 10A40500 | 1/4-28 | 4.250" | 9.250" | 7.250" | 1.250" |
| 1/8" | 10A40502S | 1/4-28 | 2.750" | 8.000" | 6.750" | 2.250" |
| 1/8" | 10A40502 | 1/4-28 | 4.250" | 10.250" | 8.250" | 2.250" |
| 1/8" | 10A40504 | 1/4-28 | 4.250" | 12.250" | 10.250" | 4.250" |
| 1/8" | 10A40506 | 1/4-28 | 4.250" | 14.250" | 12.250" | 6.250" |
| 5/32" | 10A50500S | 1/4-28 | 2.750" | 7.500" | 6.250" | 1.250" |
| 5/32" | 10A50500 | 1/4-28 | 4.250" | 9.750" | 7.750" | 1.250" |
| 5/32" | 10A50502S | 1/4-28 | 2.750" | 8.500" | 7.250" | 2.250" |
| 5/32" | 10A50502 | 1/4-28 | 4.250" | 10.750" | 8.750" | 2.250" |
| 5/32" | 10A50504 | 1/4-28 | 4.250" | 12.750" | 10.750" | 4.250" |
| 5/32" | 10A50506 | 1/4-28 | 4.250" | 14.750" | 12.750" | 6.250" |
| 3/16" | 10A60500S | 1/4-28 | 2.750" | 7.500" | 6.250" | 1.250" |
| 3/16" | 10A60500 | 1/4-28 | 4.250" | 9.750" | 7.750" | 1.250" |
| 3/16" | 10A60502S | 1/4-28 | 2.750" | 8.500" | 7.250" | 2.250" |
| 3/16" | 10A60502 | 1/4-28 | 4.250" | 10.750" | 8.750" | 2.250" |
| 3/16" | 10A60504 | 1/4-28 | 4.250" | 12.750" | 10.750" | 4.250" |
| 3/16" | 10A60506 | 1/4-28 | 4.250" | 14.750" | 12.750" | 6.250" |
| 3/16" | 10A60508 | 5/16-24 | 4.750" | 11.250" | 9.250" | 2.250" |
| 1/4" | 10A80502 | 5/16-24 | 4.750" | 11.750" | 9.750" | 2.250" |
| 5/16" | 10A100502 | 1/2-20 | 6.500" | 15.250" | 13.000" | 2.250" |
| 3/8" | 10A120502 | 1/2-20 | 6.500" | 15.313" | 13.063" | 2.250" |

"A" See End Fitting Options, pages 30-31.

Lag Stud Turnbuckle



The "Lag" cable tensioning system has been developed for direct attachment to wood surface with a minimum of 3" of wood blocking for full thread engagement. Holes are simply pre-drilled into the connecting wood surface and the lag is threaded into the hole. The strength of the cable assembly is limited to the lag holding power and mounting material (solid wood blocking is required). Lag hardware is only recommended for light duty use and not for commercial use.

For matching Non-Tensioning Fittings, see page 22.

LAG STUD TURNBUCKLE

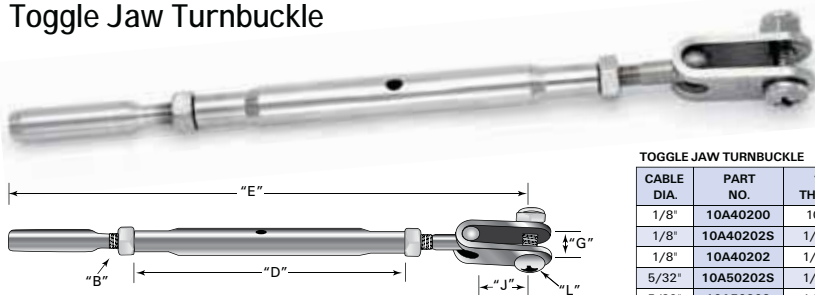
| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED |
|------------|-----------|------------|----------|---------|------------|
| 1/8" | 10A40602S | 1/4-28 | 2.750" | 5.875" | 4.625" |
| 1/8" | 10A40602 | 1/4-28 | 4.250" | 7.750" | 5.750" |
| 5/32" | 10A50602S | 1/4-28 | 2.750" | 6.375" | 5.125" |
| 5/32" | 10A50602 | 1/4-28 | 4.250" | 8.250" | 6.250" |
| 3/16" | 10A60602S | 1/4-28 | 2.750" | 6.375" | 5.125" |
| 3/16" | 10A60602 | 1/4-28 | 4.250" | 8.250" | 6.250" |
| 3/16" | 10A60604 | 5/16-24 | 4.750" | 9.500" | 7.500" |
| 1/4" | 10A80602 | 5/16-24 | 4.750" | 10.000" | 8.000" |

HANDY CRIMP*

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED |
|------------|-----------|------------|----------|--------|------------|
| 1/8" | 10A40612S | 1/4-28 | 2.750" | 6.625" | 5.375" |
| 1/8" | 10A40612 | 1/4-28 | 4.250" | 8.500" | 6.500" |
| 3/16" | 10A60612S | 1/4-28 | 2.750" | 6.750" | 5.500" |
| 3/16" | 10A60612 | 1/4-28 | 4.250" | 8.625" | 6.625" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

Toggle Jaw Turnbuckle



Utilizing "Clevis" style ends for cable attachment, this system allows for connection to eye bolts, tee-stock, angle iron, flat bars, loops, etc. The toggling feature allows for angled takeoff without the use of additional hardware. Toggle ends come standard with screw and lock nut; however, also available with clevis pin, with cotter pin or ring pin upon request. **For matching Non-Tensioning Fittings, use Series 10, page 22.**

TOGGLE JAW TURNBUCKLE

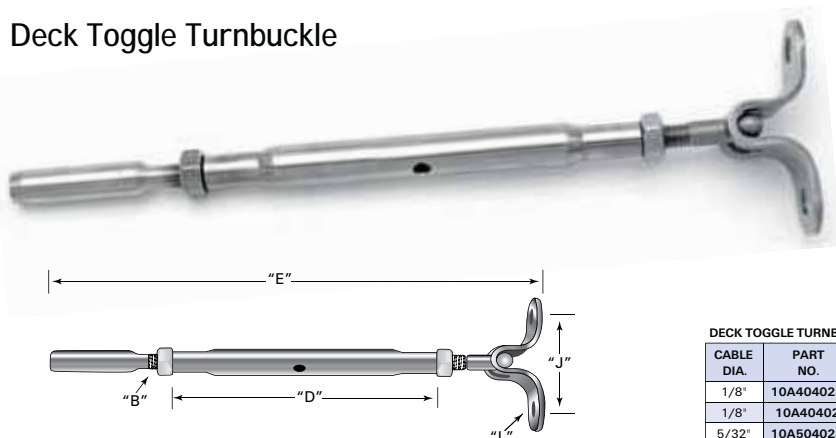
| SWAGE 316SS | | | | | | | | | |
|-------------|-----------|------------|----------|---------|---------|---------------|----------------|---------------|--|
| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | CLOSED | "J" JAW DEPTH | "L" SCREW SIZE | "G" JAW WIDTH | |
| 1/8" | 10A40200 | 10-32 | 3.500" | 8.500" | 6.000" | .563" | #10 | .250" | |
| 1/8" | 10A40202S | 1/4-28 | 2.750" | 7.375" | 6.125" | .875" | .250" | .250" | |
| 1/8" | 10A40202 | 1/4-28 | 4.250" | 9.625" | 7.625" | .875" | .250" | .250" | |
| 5/32" | 10A50202S | 1/4-28 | 2.750" | 7.875" | 6.625" | .875" | .250" | .250" | |
| 5/32" | 10A50202 | 1/4-28 | 4.250" | 10.125" | 8.125" | .875" | .250" | .250" | |
| 3/16" | 10A60202S | 1/4-28 | 2.750" | 7.875" | 6.625" | .875" | .250" | .250" | |
| 3/16" | 10A60202 | 1/4-28 | 4.250" | 10.125" | 8.125" | .875" | .250" | .250" | |
| 3/16" | 10A60204 | 5/16-24 | 4.750" | 11.000" | 9.000" | .875" | .313" | .313" | |
| 1/4" | 10A80202 | 5/16-24 | 4.750" | 11.500" | 9.500" | .875" | .313" | .313" | |
| 1/4" | 10A80204 | 3/8-24 | 5.250" | 12.250" | 10.250" | 1.063" | .375" | .375" | |

HANDY CRIMP*

| CRIMP 316SS | | | | | | | | | |
|-------------|-----------|------------|----------|---------|--------|---------------|----------------|---------------|--|
| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | CLOSED | "J" JAW DEPTH | "L" SCREW SIZE | "G" JAW WIDTH | |
| 1/8" | 10A40212S | 1/4-28 | 2.750" | 8.250" | 7.250" | .875" | .250" | .250" | |
| 1/8" | 10A40212 | 1/4-28 | 4.250" | 10.250" | 8.250" | .875" | .250" | .250" | |
| 3/16" | 10A60212S | 1/4-28 | 2.750" | 8.375" | 7.375" | .875" | .250" | .250" | |
| 3/16" | 10A60212 | 1/4-28 | 4.250" | 10.375" | 8.375" | .875" | .250" | .250" | |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

Deck Toggle Turnbuckle



Deck toggles provide a face-mount solution while allowing for angled takeoff. The deck toggle fittings are attached utilizing two screws through the deck toggle base. The mounting surfaces include wood posts or blocking, on either side of a common post by through-bolting, or drilling and tapping a metallic post. The articulation range of this deck toggle end fittings is greater than 180 degrees. The strength of the cable assembly is limited to the screw strength and attaching base material. **For matching Non-Tensioning Fittings, use Series 10, page 22.**



DECK TOGGLE TURNBUCKLE

| SWAGE 316SS | | | | | | | |
|-------------|-----------|------------|----------|---------|--------|------------------|----------------|
| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | CLOSED | "J" HOLE SPACING | "L" SCREW SIZE |
| 1/8" | 10A40402S | 1/4-28 | 2.750" | 7.000" | 5.750" | 1.500" | .250" |
| 1/8" | 10A40402 | 1/4-28 | 4.250" | 9.250" | 7.250" | 1.500" | .250" |
| 5/32" | 10A50402S | 1/4-28 | 2.750" | 7.500" | 6.250" | 1.500" | .250" |
| 5/32" | 10A50402 | 1/4-28 | 4.250" | 9.750" | 7.750" | 1.500" | .250" |
| 3/16" | 10A60402S | 1/4-28 | 2.750" | 7.500" | 6.250" | 1.500" | .250" |
| 3/16" | 10A60402 | 1/4-28 | 4.250" | 9.750" | 7.750" | 1.500" | .250" |
| 3/16" | 10A60404 | 5/16-24 | 4.750" | 10.500" | 8.500" | 1.750" | .313" |
| 1/4" | 10A80402 | 5/16-24 | 4.750" | 11.000" | 9.000" | 1.750" | .313" |
| 1/4" | 10A80404 | 3/8-24 | 5.250" | 11.750" | 9.500" | 2.000" | .375" |

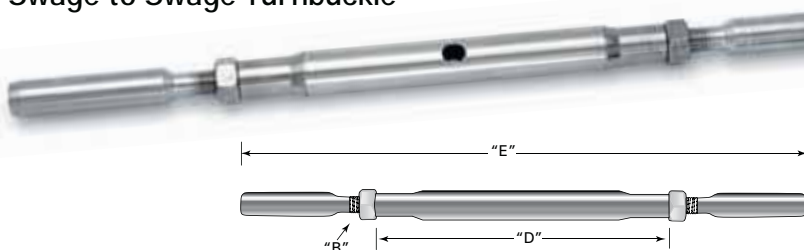
HANDY CRIMP*

| CRIMP 316SS | | | | | | | |
|-------------|-----------|------------|----------|---------|--------|------------------|----------------|
| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | CLOSED | "J" HOLE SPACING | "L" SCREW SIZE |
| 1/8" | 10A40412S | 1/4-28 | 2.750" | 7.625" | 6.625" | 1.500" | .250" |
| 1/8" | 10A40412 | 1/4-28 | 4.250" | 9.875" | 8.000" | 1.500" | .250" |
| 3/16" | 10A60412S | 1/4-28 | 2.750" | 7.750" | 6.750" | 1.500" | .250" |
| 3/16" | 10A60412 | 1/4-28 | 4.250" | 10.000" | 8.125" | 1.500" | .250" |
| 3/16" | 10A60414 | 5/16-24 | 4.750" | 10.625" | 8.500" | 1.750" | .313" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

For Mounting Hardware, see page 32.

Swage to Swage Turnbuckle



The Swage to Swage Turnbuckles are applied in longer cable runs with spacing approximately 30'-40', ensuring that proper tensioning of a cable assembly can be achieved. Additionally, these assemblies can be positioned to achieve a certain desired look in shorter cable runs. These fittings are fully compatible with any of our termination style fittings. An additional fitting is required on both ends of the cable to complete the assembly.

SWAGE TO SWAGE TURNBUCKLE

| SWAGE 316SS | | | | | |
|-------------|-----------|------------|----------|---------|---------|
| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | CLOSED |
| 1/8" | 10A40302S | 1/4-28 | 2.750" | 6.875" | 5.625" |
| 1/8" | 10A40302 | 1/4-28 | 4.250" | 9.250" | 7.250" |
| 5/32" | 10A50302S | 1/4-28 | 2.750" | 7.875" | 6.625" |
| 5/32" | 10A50302 | 1/4-28 | 4.250" | 10.250" | 8.250" |
| 3/16" | 10A60302S | 1/4-28 | 2.750" | 7.875" | 6.625" |
| 3/16" | 10A60302 | 1/4-28 | 4.250" | 10.250" | 8.250" |
| 3/16" | 10A60304 | 5/16-24 | 4.750" | 11.250" | 9.250" |
| 1/4" | 10A80302 | 5/16-24 | 4.750" | 12.250" | 10.250" |

HANDY CRIMP*

| CRIMP 316SS | | | | | |
|-------------|-----------|------------|----------|---------|--------|
| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | CLOSED |
| 1/8" | 10A40312S | 1/4-28 | 2.750" | 8.375" | 7.125" |
| 1/8" | 10A40312 | 1/4-28 | 4.250" | 10.750" | 8.750" |
| 3/16" | 10A60312S | 1/4-28 | 2.750" | 8.500" | 7.250" |
| 3/16" | 10A60312 | 1/4-28 | 4.250" | 10.875" | 8.875" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

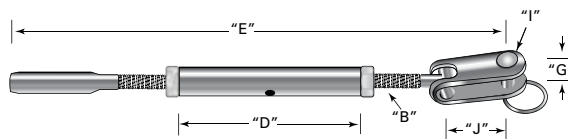
Decko Turnbuckles

The Decko Turnbuckles offer a simple smooth appearance and are a great choice when a contemporary look is desired.

Decko Toggle Jaw Turnbuckle



Utilizing "Clevis" style ends for cable attachment, this system allows for connection to eye bolts, tee-stock, angle iron, flat bars, loops, etc. The toggling feature allows for angled takeoff without the use of additional hardware. Toggle ends come standard with a clevis pin and ring pin, however, also available with screw and lock nut upon request. **For matching Non-Tensioning Fitting, use Series 15, page 22.**



DECKO TOGGLE JAW TURNBUCKLE

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED | "J" JAW DEPTH | "I" PIN SIZE | "G" JAW WIDTH |
|------------|-----------|------------|----------|---------|------------|---------------|--------------|---------------|
| 1/8" | 15A40202D | 1/4-28 | 3.00" | 9.375" | 7.875" | .8750" | .250" | .250" |
| 3/16" | 15A60202D | 1/4-28 | 3.00" | 10.000" | 8.500" | .8750" | .250" | .250" |

HANDY CRIMP*

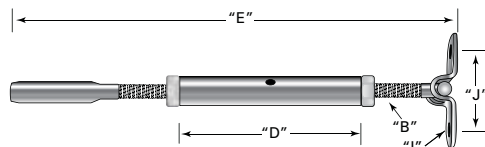
| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED | "J" JAW DEPTH | "I" PIN SIZE | "G" JAW WIDTH |
|------------|-----------|------------|----------|---------|------------|---------------|--------------|---------------|
| 1/8" | 15A40212D | 1/4-28 | 3.00" | 10.000" | 8.500" | .8750" | .250" | .250" |
| 3/16" | 15A60212D | 1/4-28 | 3.00" | 10.375" | 8.875" | .8750" | .250" | .250" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

Decko Deck Toggle Turnbuckle



Deck toggles provide a face-mount solution while allowing for angled takeoff. The deck toggle fittings are attached utilizing two screws through the deck toggle base. The mounting surfaces include wood posts or blocking, on either side of a common post by through-bolting, or drilling and tapping a metallic post. The articulation range of this deck toggle end fitting is 140 degrees. **For matching Non-Tensioning Fitting, use Series 15, page 22.**



DECKO DECK TOGGLE TURNBUCKLE

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED | "K" HOLE SPACING | "I" SCREW SIZE |
|------------|-----------|------------|----------|--------|------------|------------------|----------------|
| 1/8" | 15A40402D | 1/4-28 | 3.00" | 8.625" | 7.125" | 1.313" | .250" |
| 3/16" | 15A60402D | 1/4-28 | 3.00" | 9.250" | 7.750" | 1.313" | .250" |

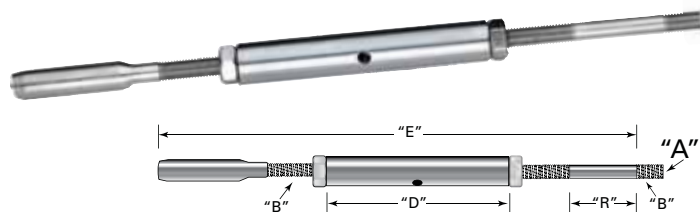
HANDY CRIMP*

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED | "K" HOLE SPACING | "I" SCREW SIZE |
|------------|-----------|------------|----------|--------|------------|------------------|----------------|
| 1/8" | 15A40412D | 1/4-28 | 3.00" | 9.250" | 7.750" | 1.313" | .250" |
| 3/16" | 15A60412D | 1/4-28 | 3.00" | 9.625" | 8.125" | 1.313" | .250" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

For Mounting Hardware, see page 32.

Decko Threaded Termination Turnbuckle



Design for ease of installation in a "confined space". Accepts a wide range of end fitting options. (See pages 30-31). This system supports any type or style of post with available wire sizes of 1/8" or 3/16". Threaded Termination Rods are available for up to 3-1/2"-thick post configurations.

DECKO THREADED TERMINATION TURNBUCKLE

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED | "R" ROD LENGTH |
|------------|-----------|------------|----------|---------|------------|----------------|
| 1/8" | 15A40502D | 1/4-28 | 3.00" | 9.125" | 7.625" | 1.500" |
| 1/8" | 15A40504D | 1/4-28 | 3.00" | 11.125" | 9.625" | 3.500" |
| 3/16" | 15A60502D | 1/4-28 | 3.00" | 9.750" | 8.250" | 1.500" |
| 3/16" | 15A60504D | 1/4-28 | 3.00" | 11.750" | 10.250" | 3.500" |

HANDY CRIMP*

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED | "R" ROD LENGTH |
|------------|-----------|------------|----------|---------|------------|----------------|
| 1/8" | 15A40512D | 1/4-28 | 3.00" | 9.750" | 8.250" | 1.500" |
| 1/8" | 15A40514D | 1/4-28 | 3.00" | 11.750" | 10.250" | 3.500" |
| 3/16" | 15A60512D | 1/4-28 | 3.00" | 10.125" | 8.625" | 1.500" |
| 3/16" | 15A60514D | 1/4-28 | 3.00" | 12.125" | 10.625" | 3.500" |

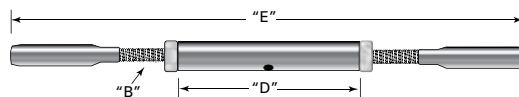
*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

"A" See End Fitting Options, pages 30-31.

Decko Swage to Swage Turnbuckle



The Swage to Swage Turnbuckles are applied in longer cable runs with spacing approximately 30'-40' ensuring that proper tensioning of a cable assembly can be achieved. Additionally, these assemblies can be positioned to achieve a certain desired look in shorter cable runs. These fittings are fully compatible with any of our termination style fittings. An additional fitting is required on both ends of the cable to complete the assembly.



DECKO SWAGE TO SWAGE TURNBUCKLE

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED |
|------------|-----------|------------|----------|---------|------------|
| 1/8" | 15A40302D | 1/4-28 | 3.00" | 9.500" | 8.000" |
| 3/16" | 15A60302D | 1/4-28 | 3.00" | 10.625" | 9.125" |

HANDY CRIMP*

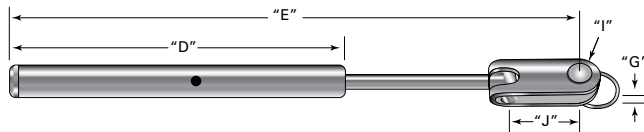
| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED |
|------------|-----------|------------|----------|---------|------------|
| 1/8" | 15A40312D | 1/4-28 | 3.00" | 10.375" | 8.875" |
| 3/16" | 15A60312D | 1/4-28 | 3.00" | 11.125" | 9.625" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

Smoothline Turnbuckles

Smoothline Style turnbuckles have no exposed threads and allow the cable to terminate internally inside the body of the turnbuckle. They look smooth on the outside but hide their essentials internally. This style works well with cable spans up to 25'. **For matching Non-Tensioning Fittings, see Smoothline Terminals, page 23.**

Smoothline Toggle Jaw Turnbuckle



Utilizing "Clevis" style ends for cable attachment, this system allows for connection to eye bolts, tee-stock, angle iron, flat bars, loops, etc. The toggling feature allows for angled takeoff without the use of additional hardware. Toggle ends come standard with a clevis pin and ring pin; also available with screw and lock nut upon request.

SMOOTHLINE TOGGLE JAW TURNBUCKLE

| CABLE DIA. | PART NO. | "D" BODY | OPEN | "E" CLOSED | "J" JAW DEPTH | "I" PIN SIZE | "G" JAW WIDTH |
|------------|------------|----------|--------|------------|---------------|--------------|---------------|
| 1/8" | 15A40202SL | 4.75" | 7.750" | 6.500" | .875" | .250" | .250" |
| 3/16" | 15A60202SL | 4.75" | 7.750" | 6.500" | .875" | .250" | .250" |
| 1/4" | 15A80202SL | 4.75" | 8.750" | 7.500" | 1.000" | .313" | .313" |

SWAGE 316SS

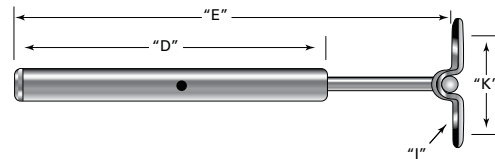
HANDY CRIMP*

| CABLE DIA. | PART NO. | "D" BODY | OPEN | "E" CLOSED | "J" JAW DEPTH | "I" PIN SIZE | "G" JAW WIDTH |
|------------|------------|----------|--------|------------|---------------|--------------|---------------|
| 1/8" | 15A40212SL | 4.75" | 7.750" | 6.500" | .875" | .250" | .250" |
| 3/16" | 15A60212SL | 4.75" | 7.750" | 6.500" | .875" | .250" | .250" |

CRIMP 316SS

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

Smoothline Deck Toggle Turnbuckle



Deck toggles provide a face-mount solution while allowing for angled takeoff. The deck toggle fittings are attached utilizing two screws through the deck toggle base. The mounting surfaces include wood posts or blocking, either side of a common post by through-bolting, or drilling and tapping a metallic post. The articulation range of this deck toggle end fitting is 140 degrees.

SMOOTHLINE DECK TOGGLE TURNBUCKLE

| CABLE DIA. | PART NO. | "D" BODY | OPEN | "E" CLOSED | "K" HOLE SPACING | "I" SCREW SIZE |
|------------|------------|----------|--------|------------|------------------|----------------|
| 1/8" | 15A40402SL | 4.75" | 7.000" | 5.750" | 1.313" | .250" |
| 3/16" | 15A60402SL | 4.75" | 7.000" | 5.750" | 1.313" | .250" |
| 1/4" | 15A80402SL | 4.75" | 8.000" | 6.750" | 1.500" | .313" |

SWAGE 316SS

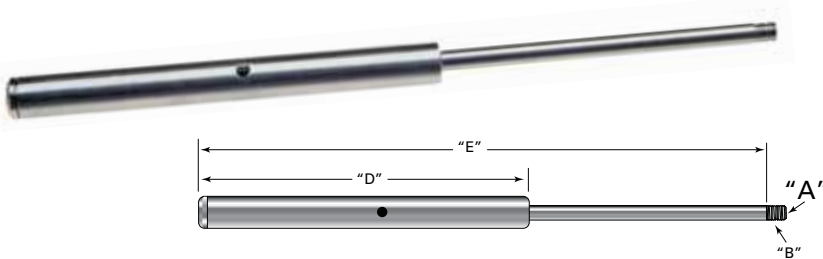
HANDY CRIMP*

| CABLE DIA. | PART NO. | "D" BODY | OPEN | "E" CLOSED | "K" HOLE SPACING | "I" SCREW SIZE |
|------------|------------|----------|--------|------------|------------------|----------------|
| 1/8" | 15A40412SL | 4.75" | 7.000" | 5.750" | 1.313" | .250" |
| 3/16" | 15A60412SL | 4.75" | 7.000" | 5.750" | 1.313" | .250" |

CRIMP 316SS

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.
For Mounting Hardware, see page 32.

Smoothline Threaded Termination Turnbuckle



SMOOTHLINE THREADED TURNBUCKLE

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED |
|------------|------------|------------|----------|--------|------------|
| 1/8" | 15A40502SL | 1/4-28 | 4.750" | 9.375" | 8.125" |
| 3/16" | 15A60502SL | 1/4-28 | 4.750" | 9.375" | 8.125" |
| 1/4" | 15A80502SL | 5/16-24 | 4.750" | 9.750" | 8.500" |

SWAGE 316SS

HANDY CRIMP*

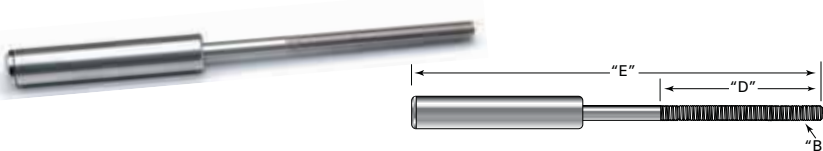
| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY | OPEN | "E" CLOSED |
|------------|------------|------------|----------|--------|------------|
| 1/8" | 15A40512SL | 1/4-28 | 4.750" | 9.375" | 8.125" |
| 3/16" | 15A60512SL | 1/4-28 | 4.750" | 9.375" | 8.125" |

CRIMP 316SS

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.
"A" See End Fitting Options, pages 30-31.

Designed for ease of installation in a "confined space". Accepts a wide range of end fitting options. (See pages 30-31). This system supports any type or style of post with available wire sizes of 1/8", 3/16" or 1/4". Will accommodate up to 3-1/2"-thick post configurations.

Smoothline Threaded Stud



SMOOTHLINE THREADED STUD

| CABLE DIA. | PART NO. | "B" THREAD | "D" THREAD LENGTH | "E" LENGTH |
|------------|------------|------------|-------------------|------------|
| 1/8" | 15T40805SL | 1/4-28 | 2.500" | 6.250" |
| 1/8" | 15T40807SL | 1/4-28 | 2.500" | 8.625" |
| 3/16" | 15T60805SL | 1/4-28 | 2.500" | 6.250" |
| 3/16" | 15T60807SL | 1/4-28 | 2.500" | 8.625" |
| 1/4" | 15T81005SL | 5/16-24 | 3.000" | 5.750" |
| 1/4" | 15T81007SL | 5/16-24 | 6.000" | 8.500" |

SWAGE 316SS

HANDY CRIMP*

| CABLE DIA. | PART NO. | "B" THREAD | "D" THREAD LENGTH | "E" LENGTH |
|------------|------------|------------|-------------------|------------|
| 1/8" | 15T40815SL | 1/4-28 | 2.500" | 6.250" |
| 1/8" | 15T40817SL | 1/4-28 | 2.500" | 8.625" |
| 3/16" | 15T60815SL | 1/4-28 | 2.500" | 6.250" |
| 3/16" | 15T60817SL | 1/4-28 | 2.500" | 8.625" |

CRIMP 316SS

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

The Smoothline Threaded Stud provides a hidden cable attachment by allowing the cable to terminate internally. Simple and clean, it will accommodate up to 3-1/2"-thick post configurations.

Non-Tensioning Fittings



Where to use these fittings.

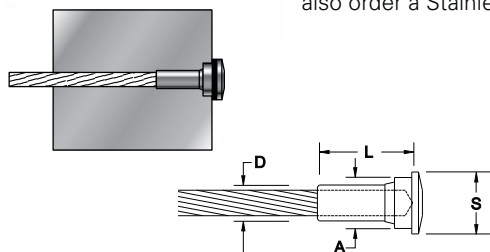
Often you do not need a tensioning device on both ends of your cable. This applies where your run is relatively short or where you are cutting and swaging the cables on site (and can get more precise measurements than having the cables pre-cut by the factory).

Invisiware® Radius Ferrule

Often used in combination with the Invisiware® receiver (page 11), **this fitting is also hidden inside the end post** with only the head exposed on the outside of the post. When installed, it looks the same as the Invisiware® receiver except it costs much less.

Invisiware® radius ferrules are used with pipe and with round, square or rectangular metal tubing. Pipe ends are counterbored, so the full perimeter of the head rests on a flat surface in the pipe. The head rests on the outside wall of a flat-sided metal post. A plastic washer is included and acts as a scratch-resistant barrier between the head of the fitting and the metal post.

For use in wood, the Invisiware® radius ferrule can rest against the outside of the post or the post can be counterbored with the radius ferrule recessed in the post. For wood applications, also order a Stainless Steel Washer, Part No. 11HW14 (page 31).



INVISIWARE® RADIUS FERRULE

SWAGE 316SS

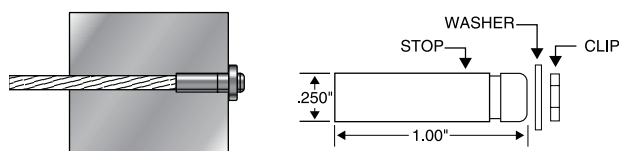
| CABLE DIA. | PART NO. | "D" DIAMETER AFTER SWAGED | "L" LENGTH AFTER SWAGED | "S" HEAD DIAMETER | "A" SHOULDER DIAMETER |
|------------|----------|---------------------------|-------------------------|-------------------|-----------------------|
| 1/8" | 20FRF4 | .250" | .750" | .537" | .437" |
| 3/16" | 20FRF6 | .250" | .750" | .537" | .437" |
| 1/4" | 20FRF8 | .375" | 1.000" | .646" | .531" |
| 5/16" | 20FRF10 | .500" | 1.000" | .865" | .687" |
| 3/8" | 20FRF12 | .500" | 1.000" | .865" | .687" |

CAI Clip-on Stop

Ideal for use with cables that are cut and the fittings are attached at the factory. Intermediate posts can be drilled for the 1/4" stop to pass through. **No field swaging is required.** Or you can swage them in the field if you wish. A special clip and washer secure the stop to the end of the cable.

Pipe or round tubing end posts are counterbored so the full perimeter of the head of the stop rests on a flat surface in the pipe. The stop rests against the outside wall of a flat-sided post.

For swaging at the factory, determine the hardware to use on the tensioning end of the cable, then check with the factory to determine the cable lengths to be provided with the swaged fittings attached. Stop, washer and clip are included. Available for 1/8" and 3/16" cable.



CLIP-ON STOP

SWAGE 316SS

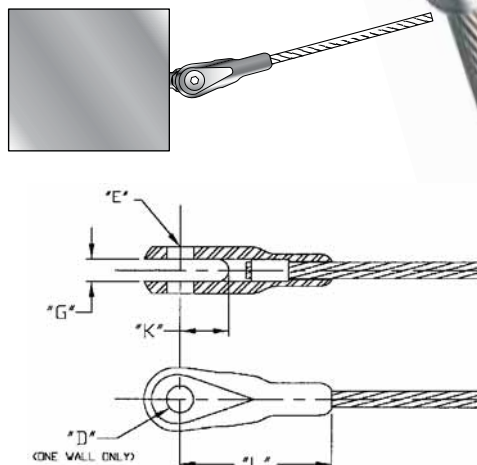
| CABLE DIA. | FOR USE WITH | PART NO. | WASHER DIAMETER |
|------------|--------------|----------|-----------------|
| 1/8" | WOOD POST | 20ACS4W | |
| 3/16" | WOOD POST | 20ACS6W | 59/64" (.922") |
| 1/8" | METAL POST | 20ACS4M | |
| 3/16" | METAL POST | 20ACS6M | 15/32" (.468") |

CAI Fixed Jaw

Often used with our Adjust-A-Jaw® tensioner (page 13), because it is shaped to match the clevis end on the Adjust-A-Jaw® tensioner but costs considerably less. It can be used on level runs and on stairs and severe pitches.

The CAI Fixed Jaw also makes an attractive fitting where a high-tech look is desired, where you may wish to see hardware on your railing, or there is no access to the back of the end post.

Use our fixed tabs or threaded tabs (page 28) or lag eyes (page 29) to mount the CAI Fixed Jaw fittings to your end posts. Or you can mount them using flat bar or angle iron welded to your post with holes drilled to accept the clevis. See the tabulated drawing and chart below to determine how this fitting interfaces with your end post.



FIXED JAW

SWAGE 316SS

| CABLE DIA. | PART NO. | USE WITH FERRULE NO.* | USE WITH SCREW NO.* | "D" DIA. | "E" THREAD | "G" | "K" | "L" |
|------------|----------|-----------------------|---------------------|----------|------------|-------|------|-------|
| 1/8" | 20FFJ4 | 20FF4 | 11HBS8 | .260" | 1/4-28 | .260" | .56" | 1.75" |
| 3/16" | 20FFJ4 | 20FF6 | 11HBS8 | .260" | 1/4-28 | .260" | .56" | 1.75" |
| 1/4" | 20FFJ8 | 20FF8 | 11HBS12 | .390" | 3/8-24 | .313" | .75" | 2.12" |
| 5/16" | 20FFJ10 | 20FF10 | 11HBS12 | .390" | 3/8-24 | .348" | .87" | 2.25" |
| 3/8" | 20FFJ10 | 20FF12 | 11HBS12 | .390" | 3/8-24 | .348" | .87" | 2.25" |

*Order Ferrule and Screw separately.

Illustrated with an Adjust-A-Jaw® tensioner on the other end (see page 13).

CAI Clip-on Fixed Jaw

Same as our CAI Fixed Jaw fittings, except the cable is attached to the fitting with a special clip that is installed on site by hand. The cable is supplied by the factory with a tensioner on one end and a ferrule on the other end. **There is no field swaging.** You simply slip the ferrule end of the cable through the body of the fixed jaw, slip on the special clip, then pull the cable back through the body to secure the cable inside. Check with the factory to determine cable lengths to be supplied with swaged fittings. Available for 1/8" and 3/16" cable only.

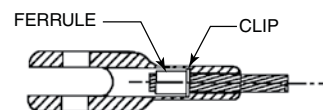
CLIP-ON FIXED JAW

SWAGE 316SS

| CABLE DIA. | PART NO. | USE WITH FERRULE NO.* | USE WITH SCREW NO.* | "D" DIA. | "E" THREAD | "G" | "K" | "L" |
|------------|----------|-----------------------|---------------------|----------|------------|-------|------|-------|
| 1/8" | 20ACFJ4 | 20FF4 | 11HBS8 | .260" | 1/4-28 | .260" | .56" | 1.75" |
| 3/16" | 20ACFJ6 | 20FF6 | 11HBS8 | .260" | 1/4-28 | .260" | .56" | 1.75" |

*Order Ferrule and Screw separately.

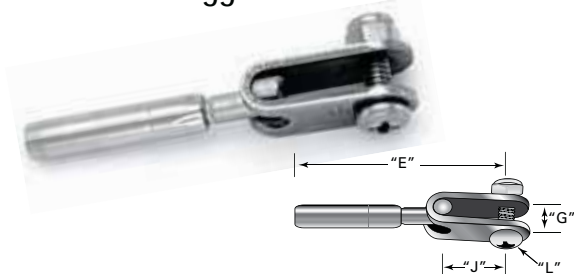
See Fixed Jaw drawing above.



Non-Tensioning Fittings



Series 10 Toggle Jaw



SERIES 10 TOGGLE JAW

SWAGE 316SS

| CABLE DIA. | PART NO. | "E" LENGTH | "J" HOLE SIZE | "L" HOLE SPACING | "G" JAW WIDTH |
|------------|----------|------------|---------------|------------------|---------------|
| 1/8" | 10F40200 | 3.063" | .438" | .250" | .250" |
| 1/8" | 10F40202 | 3.500" | .688" | .250" | .250" |
| 5/32" | 10F50202 | 3.500" | .688" | .250" | .250" |
| 3/16" | 10F60202 | 3.438" | .688" | .250" | .250" |
| 3/16" | 10F60204 | 3.875" | .688" | .313" | .313" |
| 1/4" | 10F80202 | 4.188" | .688" | .313" | .313" |
| 1/4" | 10F80204 | 4.625" | .938" | .375" | .375" |

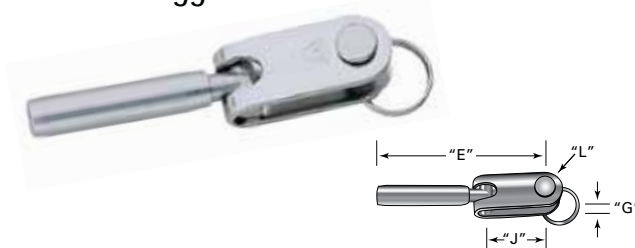
HANDY CRIMP*

CRIMP 316SS

| CABLE DIA. | PART NO. | "E" LENGTH | "J" HOLE SIZE | "L" HOLE SPACING | "G" JAW WIDTH |
|------------|----------|------------|---------------|------------------|---------------|
| 1/8" | 10F40212 | 4.250" | .688" | .250" | .250" |
| 3/16" | 10F60212 | 3.938" | .688" | .250" | .250" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

Series 15 Toggle Jaw



SERIES 15 TOGGLE JAW

SWAGE 316SS

| CABLE DIA. | PART NO. | "E" LENGTH | "J" HOLE SIZE | "L" HOLE SPACING | "G" JAW WIDTH |
|------------|----------|------------|---------------|------------------|---------------|
| 1/8" | 15F40202 | 3.188" | .688" | .250" | .250" |
| 3/16" | 15F60202 | 3.313" | .688" | .250" | .250" |
| 1/4" | 15F80202 | 3.250" | .688" | .313" | .313" |
| 1/4" | 15F80204 | 3.750" | .688" | .375" | .375" |

HANDY CRIMP*

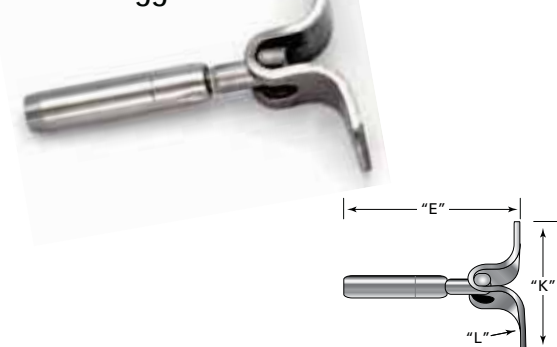
CRIMP 316SS

| CABLE DIA. | PART NO. | "E" LENGTH | "J" HOLE SIZE | "L" HOLE SPACING | "G" JAW WIDTH |
|------------|------------|------------|---------------|------------------|---------------|
| 1/8" | 15F40212** | 3.188" | .688" | .250" | .250" |
| 3/16" | 15F60212 | 3.688" | .688" | .250" | .250" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

**Not a true 1/8" fitting, conversion sleeve included.

Series 10 Deck Toggle



SERIES 10 DECK TOGGLE

SWAGE 316SS

| CABLE DIA. | PART NO. | "E" LENGTH | "L" HOLE SIZE | "K" HOLE SPACING |
|------------|----------|------------|---------------|------------------|
| 1/8" | 10F40402 | 3.125" | .250" | 1.500" |
| 5/32" | 10F50402 | 3.000" | .250" | 1.500" |
| 3/16" | 10F60402 | 3.000" | .250" | 1.500" |
| 3/16" | 10F60404 | 3.500" | .313" | 1.750" |
| 1/4" | 10F80402 | 3.875" | .313" | 1.750" |
| 1/4" | 10F80404 | 4.000" | .375" | 2.000" |

HANDY CRIMP*

CRIMP 316SS

| CABLE DIA. | PART NO. | "E" LENGTH | "L" HOLE SIZE | "K" HOLE SPACING |
|------------|----------|------------|---------------|------------------|
| 1/8" | 10F40412 | 3.625" | .250" | 1.500" |
| 3/16" | 10F60412 | 3.625" | .250" | 1.500" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

For Mounting Hardware, see page 32.

Series 15 Deck Toggle



SERIES 15 DECK TOGGLE

SWAGE 316SS

| CABLE DIA. | PART NO. | "E" LENGTH | "L" HOLE SIZE | "K" HOLE SPACING |
|------------|----------|------------|---------------|------------------|
| 1/8" | 15F40402 | 2.125" | .250" | 1.313" |
| 3/16" | 15F60402 | 2.125" | .250" | 1.313" |
| 1/4" | 15F80402 | 3.250" | .313" | 1.500" |

HANDY CRIMP*

CRIMP 316SS

| CABLE DIA. | PART NO. | "E" LENGTH | "L" HOLE SIZE | "K" HOLE SPACING |
|------------|------------|------------|---------------|------------------|
| 1/8" | 15F40412** | 2.750" | .250" | 1.313" |
| 3/16" | 15F60412 | 3.000" | .250" | 1.313" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

**Not a true 1/8" fitting, conversion sleeve included.

For Mounting Hardware, see page 32.

Lag Swage Stud



LAG SWAGE STUD SWAGE 316SS

| CABLE DIA. | PART NO. | "E" LENGTH |
|------------|----------|------------|
| 1/8" | 10F40602 | 2.750" |
| 5/32" | 10F50602 | 2.688" |
| 3/16" | 10F60602 | 2.688" |
| 1/4" | 10F80602 | 3.250" |

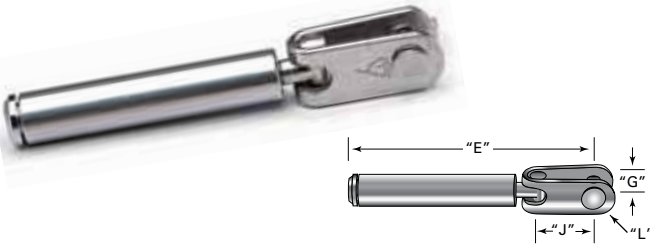
HANDY CRIMP*

CRIMP 316SS

| CABLE DIA. | PART NO. | "E" LENGTH |
|------------|----------|------------|
| 1/8" | 10F40612 | 3.000" |
| 3/16" | 10F60612 | 3.375" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

Smoothline Toggle Jaw



SMOOTHLINE TOGGLE JAW **SWAGE 316SS**

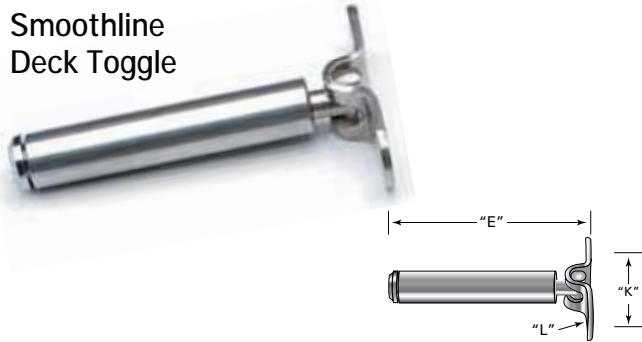
| CABLE DIA. | PART NO. | "E" LENGTH | "J" JAW DEPTH | "L" PIN SIZE | "G" JAW WIDTH |
|------------|------------|------------|---------------|--------------|---------------|
| 1/8" | 15F40202SL | 3.875" | .688" | .250" | .250" |
| 3/16" | 15F60202SL | 3.875" | .688" | .250" | .250" |
| 1/4" | 15F80202SL | 4.500" | .688" | .313" | .313" |

HANDY CRIMP* **CRIMP 316SS**

| CABLE DIA. | PART NO. | "E" LENGTH | "J" JAW DEPTH | "L" PIN SIZE | "G" JAW WIDTH |
|------------|------------|------------|---------------|--------------|---------------|
| 1/8" | 15F40212SL | 3.875" | .688" | .250" | .250" |
| 3/16" | 15F60212SL | 3.875" | .688" | .250" | .250" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

Smoothline Deck Toggle



SMOOTHLINE DECK TOGGLE **SWAGE 316SS**

| CABLE DIA. | PART NO. | "E" LENGTH | "L" HOLE SIZE | "K" HOLE SPACING |
|------------|------------|------------|---------------|------------------|
| 1/8" | 15F40402SL | 3.250" | .250" | 1.313" |
| 3/16" | 15F60402SL | 3.250" | .250" | 1.313" |
| 1/4" | 15F80402SL | 3.625" | .313" | 1.500" |

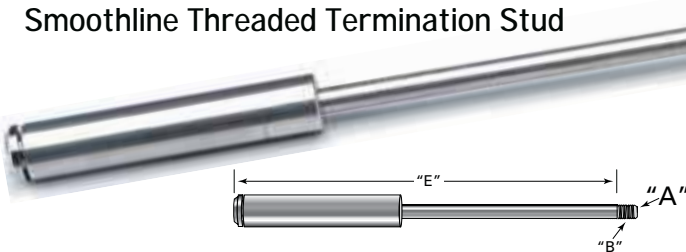
HANDY CRIMP* **CRIMP 316SS**

| CABLE DIA. | PART NO. | "E" LENGTH | "L" HOLE SIZE | "K" HOLE SPACING |
|------------|------------|------------|---------------|------------------|
| 1/8" | 15F40412SL | 3.250" | .250" | 1.313" |
| 3/16" | 15F60412SL | 3.250" | .250" | 1.313" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

For Mounting Hardware, see page 32.

Smoothline Threaded Termination Stud



SMOOTHLINE THREADED TERMINATION STUD **SWAGE 316SS**

| CABLE DIA. | PART NO. | "B" THREAD | "E" LENGTH |
|------------|------------|------------|------------|
| 1/8" | 10F40802SL | 1/4-28 | 6.250" |
| 3/16" | 10F60802SL | 1/4-28 | 6.250" |
| 1/4" | 10F80802SL | 5/16-24 | 6.250" |

HANDY CRIMP* **CRIMP 316SS**

| CABLE DIA. | PART NO. | "B" THREAD | "E" LENGTH |
|------------|------------|------------|------------|
| 1/8" | 10F40812SL | 1/4-28 | 6.250" |
| 3/16" | 10F60812SL | 1/4-28 | 6.250" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

"A" See End Fitting Options, pages 30-31.

Termination Stud



TERMINATION STUD **SWAGE 316SS**

| CABLE DIA. | PART NO. | "A" CAP SIZE | "T" CAP THICKNESS | "D" BODY DIA. | "E" BODY LENGTH |
|------------|----------|--------------|-------------------|---------------|-----------------|
| 1/8" | 10F40102 | .500" | .205" | .219" | 1.625" |
| 5/32" | 10F50102 | .563" | .205" | .250" | 1.906" |
| 3/16" | 10F60102 | .563" | .205" | .313" | 1.938" |
| 1/4" | 10F80102 | .563" | .220" | .375" | 2.550" |
| 5/16" | 10F10102 | .938" | .437" | .563" | 3.625" |
| 3/8" | 10F12102 | .938" | .437" | .625" | 3.687" |

HANDY CRIMP* **CRIMP 316SS**

| CABLE DIA. | PART NO. | "A" CAP SIZE | "T" CAP THICKNESS | "D" BODY DIA. | "E" BODY LENGTH |
|------------|----------|--------------|-------------------|---------------|-----------------|
| 1/8" | 10F40112 | .500" | .205" | .213" | 2.3125" |
| 3/16" | 10F60112 | .563" | .205" | .294" | 2.3750" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

Countersunk Termination Stud



COUNTERSUNK TERMINATION STUD **SWAGE 316SS**

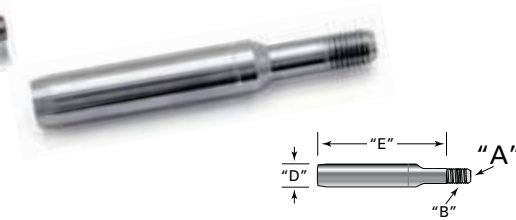
| CABLE DIA. | PART NO. | "A" CAP SIZE | "C" ANGLE | "D" BODY DIA. | "E" BODY LENGTH |
|------------|----------|--------------|-----------|---------------|-----------------|
| 1/8" | 10F40702 | .500" | 82° | .219" | 1.50" |
| 5/32" | 10F50702 | .563" | 82° | .250" | 1.75" |
| 3/16" | 10F60702 | .563" | 82° | .313" | 1.75" |

HANDY CRIMP* **CRIMP 316SS**

| CABLE DIA. | PART NO. | "A" CAP SIZE | "C" ANGLE | "D" BODY DIA. | "E" BODY LENGTH |
|------------|----------|--------------|-----------|---------------|-----------------|
| 1/8" | 10F40712 | .500" | 82° | .213" | 2.625" |
| 3/16" | 10F60712 | .563" | 82° | .294" | 2.750" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

Threaded Termination Stud



THREADED TERMINATION STUD **SWAGE 316SS**

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY DIA. | "E" LENGTH |
|------------|----------|------------|---------------|------------|
| 1/8" | 10T40801 | 1/4-28 | .219" | 1.313" |
| 5/32" | 10T50801 | 1/4-28 | .250" | 1.750" |
| 3/16" | 10T60801 | 1/4-28 | .313" | 1.750" |
| 3/16" | 10T61001 | 5/16-24 | .313" | 1.750" |
| 1/4" | 10T81001 | 5/16-24 | .375" | 1.563" |

HANDY CRIMP* **CRIMP 316SS**

| CABLE DIA. | PART NO. | "B" THREAD | "D" BODY DIA. | "E" LENGTH |
|------------|----------|------------|---------------|------------|
| 1/8" | 10T40811 | 1/4-28 | .213" | 2.000" |
| 3/16" | 10T60811 | 1/4-28 | .294" | 2.125" |

*Requires 11THCT1 Handy Crimp Tool. See Tools, page 36.

"A" See End Fitting Options, pages 30-31.



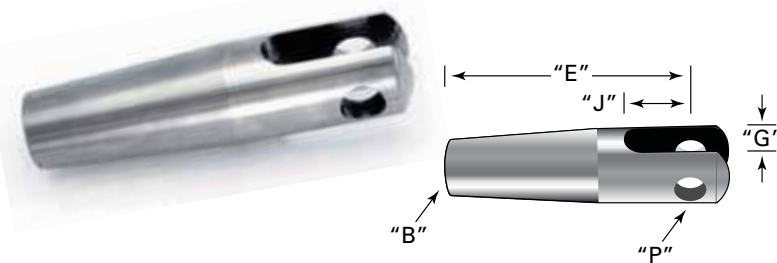
Architectural Rod Systems

Made from 316 grade stainless steel, this elegant fork system is used for both rod and cable applications and is engineered for strength as well as aesthetic appeal. The fork end fittings are offered from 1/4" – 2" pin diameter. The system includes left and right hand thread configurations as well as wrench flats to facilitate tensioning. Fork pin configurations include a standard clevis pin with cotter pin retention or an upgrade to a double headed clevis pin for a smooth look. Architectural lock nuts are engineered to complement the aesthetics of the mating fork assembly.

Rods custom made to your specifications.



Architectural Adjuster Fork

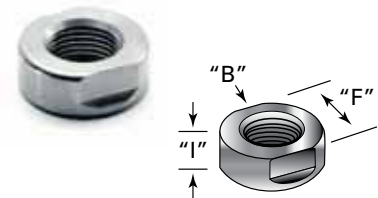


ARCHITECTURAL ADJUSTER FORK

316SS

| PART NO. | "B" THREAD | "E" LENGTH | "J" JAW DEPTH | "G" JAW WIDTH | "P" PIN SIZE | ADJUSTMENT |
|----------|------------|------------|---------------|---------------|--------------|------------|
| 10FRF08L | 1/4-28 LH | 1.813" | .594" | .250" | .250" | .938" |
| 10FRF08R | 1/4-28 RH | 1.813" | .594" | .250" | .250" | .938" |
| 10FRF10L | 5/16-24 LH | 2.375" | .625" | .313" | .313" | 1.250" |
| 10FRF10R | 5/16-24 RH | 2.375" | .625" | .313" | .313" | 1.250" |
| 10FRF12L | 3/8-24 LH | 3.000" | .781" | .375" | .375" | 1.625" |
| 10FRF12R | 3/8-24 RH | 3.000" | .781" | .375" | .375" | 1.625" |
| 10FRF16L | 1/2-20 LH | 4.000" | 1.125" | .500" | .500" | 1.750" |
| 10FRF16R | 1/2-20 RH | 4.000" | 1.125" | .500" | .500" | 1.750" |
| 10FRF20L | 5/8-18 LH | 4.750" | 1.250" | .625" | .625" | 2.500" |
| 10FRF20R | 5/8-18 RH | 4.750" | 1.250" | .625" | .625" | 2.500" |
| 10FRF24L | 3/4-16 LH | 5.375" | 1.500" | .750" | .750" | 2.875" |
| 10FRF24R | 3/4-16 RH | 5.375" | 1.500" | .750" | .750" | 2.875" |
| 10FRF28L | 7/8-14 LH | 6.000" | 1.750" | .875" | .875" | 3.125" |
| 10FRF28R | 7/8-14 RH | 6.000" | 1.750" | .875" | .875" | 3.125" |
| 10FRF32L | 1.0-12 LH | 6.875" | 2.000" | 1.000" | 1.000" | 3.500" |
| 10FRF32R | 1.0-12 RH | 6.875" | 2.000" | 1.000" | 1.000" | 3.500" |

Architectural Adjuster Fork Lock Nut

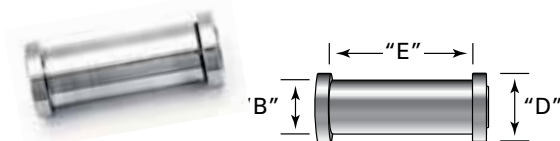


ARCHITECTURAL ADJUSTER FORK LOCK NUT

316SS

| PART NO. | "B" THREAD | "I" THICKNESS | "F" FLATS | OUTSIDE DIAMETER |
|-----------|------------|---------------|-----------|------------------|
| 10HRLN08L | 1/4-28 LH | .188" | .313" | .375" |
| 10HRLN08R | 1/4-28 RH | .188" | .313" | .375" |
| 10HRLN10L | 5/16-24 LH | .313" | .625" | .500" |
| 10HRLN10R | 5/16-24 RH | .313" | .625" | .500" |
| 10HRLN12L | 3/8-24 LH | .281" | .750" | .563" |
| 10HRLN12R | 3/8-24 RH | .281" | .750" | .563" |
| 10HRLN16L | 1/2-20 LH | .375" | .875" | .875" |
| 10HRLN16R | 1/2-20 RH | .375" | .875" | .875" |
| 10HRLN20L | 5/8-18 LH | .438" | 1.000" | 1.125" |
| 10HRLN20R | 5/8-18 RH | .438" | 1.000" | 1.125" |
| 10HRLN24L | 3/4-16 LH | .500" | 1.063" | 1.250" |
| 10HRLN24R | 3/4-16 RH | .500" | 1.063" | 1.250" |
| 10HRLN28L | 7/8-14 LH | .500" | 1.250" | 1.563" |
| 10HRLN28R | 7/8-14 RH | .500" | 1.250" | 1.563" |
| 10HRLN32L | 1.0-12 LH | .563" | 1.375" | 1.625" |
| 10HRLN32R | 1.0-12 RH | .563" | 1.375" | 1.625" |

Double-Headed Clevis Pin



DOUBLE-HEADED CLEVIS PIN

316SS

| PART NO. | "E" LENGTH | "B" BODY DIA. | "D" HEAD DIA. |
|------------|------------|---------------|---------------|
| 10HFCP0820 | .625" | .250" | .375" |
| 10HFCP1024 | .750" | .313" | .438" |
| 10HFCP1228 | .875" | .375" | .500" |
| 10HFCP1640 | 1.250" | .500" | .625" |
| 10HFCP2048 | 1.500" | .625" | .750" |
| 10HFCP2464 | 2.000" | .750" | .875" |
| 10HFCP2872 | 2.250" | .875" | 1.000" |
| 10HFCP3280 | 2.500" | 1.000" | 1.250" |



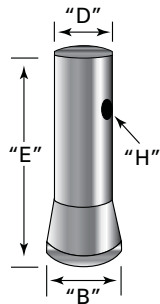
Trellis System

Trellis System Hardware

Trellis system hardware made from 316-grade stainless steel is offered in 1/8" to 1/4" wire diameters. The system is designed to accommodate cables attaching perpendicular to each other to form a grid pattern. Cable sizes greater than 1/8" utilize the 10HTP08 series posts which have an additional support base for stability. The posts offer a through-mounting system for attachment to a surface.



Trellis Posts



TRELLIS POSTS

| WIRE DIA. | PART NO. | "E" LENGTH | "D" BODY DIA. | "B" BASE DIA. | THROUGH HOLES | "H" HOLE DIA. | MOUNT SCREW HOLE SIZE |
|------------|-------------|------------|---------------|---------------|---------------|---------------|-----------------------|
| 1/8" | 10HTP08961 | 3.000" | .750" | 1.000" | 1 | .266" | .375" |
| 1/8" | 10HTP08962 | 4.000" | .750" | 1.000" | 1 | .266" | .375" |
| 1/8" | 10HTP081281 | 3.000" | .750" | 1.000" | 2 | .266" | .375" |
| 1/8" | 10HTP081282 | 4.000" | .750" | 1.000" | 2 | .266" | .375" |
| 3/16"-1/4" | 10HTP121281 | 4.000" | 1.000" | 1.250" | 1 | .391" | .375" |
| 3/16"-1/4" | 10HTP121282 | 4.000" | 1.000" | 1.250" | 2 | .391" | .375" |

316SS

Trellis Post Wide Support Base



TRELLIS POST WIDE SUPPORT BASE
For use with 10HTP08XXX Trellis Posts

316SS

| PART NO. | "T" THICKNESS | "B" BASE DIA. | MOUNT SCREW HOLE SIZE |
|----------|---------------|---------------|-----------------------|
| 10HTPB08 | .250" | 1.750" | .375" |

Mounting Screw – Socket Head Cap Screw



SOCKET HEAD CAP SCREW 316SS

| PART NO. | "B" THREAD | "E" LENGTH |
|----------|------------|------------|
| 11HCS122 | 3/8-16 | 2.000" |
| 11HCS123 | 3/8-16 | 3.000" |

Wood Mounting Screw – Flat Head Philips Screw

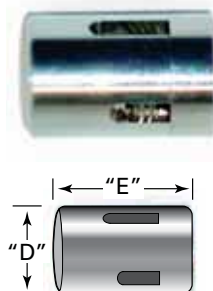


WOOD MOUNTING SCREW – FLAT HEAD PHILIPS SCREW 316SS

| PART NO. | THREAD SIZE | LENGTH |
|-----------|-------------|--------|
| 11HFS8128 | 1/4" | 4.000" |

Cross Clamps

Cross clamps are used in conjunction with trellis posts as a "stiffener" at the cable crossing points where no post exists and to attach horizontal and vertical interior cables to perimeter cables.



CROSS CLAMPS

316SS

| CABLE DIA. | PART NO. | "E" LENGTH | "D" BODY DIA. |
|------------|----------|------------|---------------|
| 1/8" | 10HTCC04 | 1.188" | .750" |
| 5/32" | 10HTCC05 | 1.203" | .750" |
| 3/16" | 10HTCC06 | 1.250" | .750" |
| 1/4" | 10HTCC08 | 1.375" | .750" |





Cable railing systems can be used with aluminum, steel, or wood railing applications.



26
7/1/11



**Cable Art
Incorporated**

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28210 Avenue Crocker, Suite 307 • Valencia, CA 91355
Email: sales@cableart.com • Website: www.cableart.com



Used on decks and patios, cable railing systems provide safety without interfering with the view.

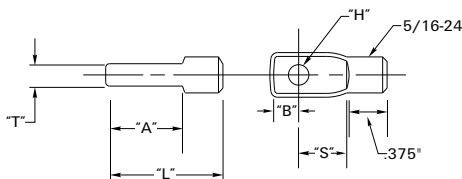


Mounting Accessories



Threaded Tab

The threaded tab screws into a drilled and tapped hole on the inside wall of the end post for mounting an Adjust-A-Jaw® or Adjust-A-Body® tensioner, CAI Fixed Jaw, Toggle Jaw system, or Push-Lock™ fitting with threaded eye. You save the expense of welding tees or tabs onto your end post. Recommended only when you are using a minimum schedule 80 pipe end post or a square or rectangular steel end post with a minimum .250" wall.



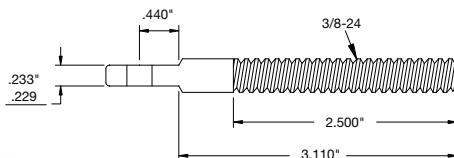
THREADED TAB

316SS

| CABLE DIA. | PART NO. | "H" | "S" | "T" | "A" | "B" | "L" |
|------------|----------|-------|-------|-------------|--------|-------|--------|
| 1/8" | 20HTT4 | .265" | .500" | .233"/.229" | .813" | .313" | 1.250" |
| 3/16" | 20HTT4 | .265" | .500" | .233"/.229" | .813" | .313" | 1.250" |
| 1/4" | 20HTT8 | .390" | .625" | .295"/.285" | 1.250" | .375" | 1.625" |
| 5/16" | 20HTT8 | .390" | .625" | .295"/.285" | 1.250" | .375" | 1.625" |
| 3/8" | 20HTT8 | .390" | .625" | .295"/.285" | 1.250" | .375" | 1.625" |

Extended Length Threaded Tab

Extended length, same as above except there is no need to thread the hole in your end post. Cut to desired length and secure to end post with acorn nut and thread sealant.



EXTENDED LENGTH THREADED TAB

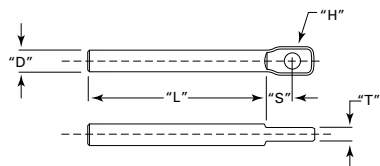
316SS

| CABLE DIA. | PART NO. | USE WITH SS ACORN NUT* |
|--------------|----------|------------------------|
| 1/8" & 3/16" | 20HXTT4 | 11HCN12R |

*Order Acorn Nut separately (page 31).

Fixed Tab

Welded into an end post to make a strong tab for use in mounting an Adjust-A-Jaw® or Adjust-A-Body® tensioner, CAI Fixed Jaw, Toggle Jaw system, or Push-Lock™ fitting with threaded eye. The fixed tab is cut to length if necessary, inserted in a hole drilled through the post and welded to the outside wall. The welded surface is then ground to the original contour of the post, thus hiding the weld.



FIXED TAB

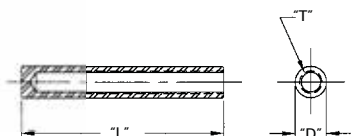
STEEL 304SS

| CABLE DIA. | PART NO. | "H" | "S" | "T" | "D" | "L" |
|------------|----------|-------|------|-------------|-------|-------|
| 1/8" | 20HFT4* | .265" | .44" | .233"/.229" | .375" | 3.11" |
| 3/16" | 20HFT4* | .265" | .44" | .233"/.229" | .375" | 3.11" |
| 1/4" | 20HFT8* | .390" | .68" | .295"/.285" | .562" | 3.00" |

*Specify "A" for Carbon Steel or "B" for Type 304 Stainless Steel.

Welded Receiver

A fixed end, non-tensioning device, the welded receiver provides a sturdy, threaded receptacle in the end post for an Invisiware® swaging stud (see page 11). The welded receiver is cut to length if necessary, inserted in a hole drilled through the post and welded to the outside wall. The welded surface is then ground to the original contour of the post, thus hiding the weld.



WELDED RECEIVER

STEEL 304SS

| CABLE DIA. | PART NO. | USE WITH STUD NO. | "D" | "T" | "L" |
|------------|----------|-------------------|-------|---------|-------|
| 1/8" | 20FWR4* | 20FS4 | .437" | 5/16-24 | 2.82" |
| 3/16" | 20FWR4* | 20FS6 | .437" | 5/16-24 | 2.82" |
| 1/4" | 20FWR8* | 20FS8 | .531" | 7/16-20 | 2.82" |

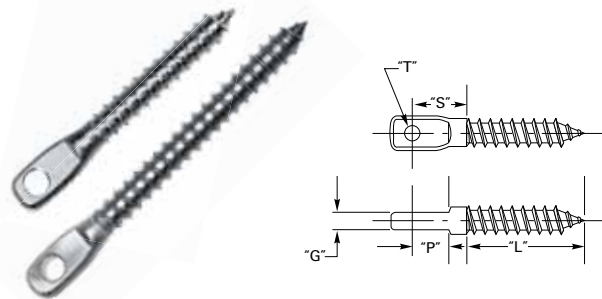
*Specify "A" for Carbon Steel or "B" for Type 304 Stainless Steel.

Lag Eye

A convenient, easy-to-install means for attaching an Adjust-A-Jaw® or Adjust-A-Body® tensioner, CAI Fixed Jaw, Toggle Jaw system, or Push-Lock™ fitting with threaded eye to a wood post.



Post with a CAI Fixed Jaw attached.



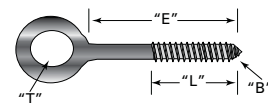
LAG EYE

| CABLE DIA. | PART NO. | "G" | "T" | "S" | "L" | "P" | DRILL SIZE REQUIRED | MIN. NOMINAL TIMBER SIZE |
|------------|----------|-------------|-------|--------|-------|-------|---------------------|--------------------------|
| 1/8" | 20HLE4 | .233"/.229" | .253" | .625" | 1.50" | .500" | 17/64" | 4 x 4 |
| 3/16" | 20HLE4 | .233"/.229" | .253" | .625" | 1.50" | .500" | 17/64" | |
| 1/4" | 20HLE8 | .255"/.265" | .385" | 1.188" | 2.00" | .688" | 3/8" | |

EXTENDED LENGTH LAG EYE WITH 3" THREAD

| | | | | | | | | |
|-------|---------|-------------|-------|-------|-------|-------|--------|-------|
| 1/8" | 20HLE4L | .233"/.229" | .253" | .625" | 3.00" | .500" | 17/64" | 4 x 4 |
| 3/16" | | | | | | | | |

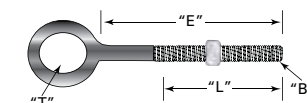
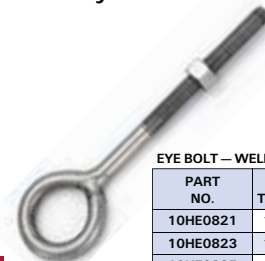
Lag Eye — Welded



LAG EYE — WELDED

| PART NO. | "B" THREAD | "E" SHANK LENGTH | "L" THREAD LENGTH | "T" OPENING |
|----------|------------|------------------|-------------------|-------------|
| 10HL0801 | 1/4" | 2.750" | 1.750" | .563" |
| 10HL1001 | 5/16" | 2.750" | 1.750" | .625" |
| 10HL1201 | 3/8" | 3.000" | 1.750" | .750" |

Eye Bolt — Welded



EYE BOLT — WELDED

| PART NO. | "B" THREAD | "E" SHANK LENGTH | "L" THREAD LENGTH | "T" OPENING |
|----------|------------|------------------|-------------------|-------------|
| 10HE0821 | 1/4-20 | .875" | .750" | .563" |
| 10HE0823 | 1/4-20 | 1.750" | 1.750" | .375" |
| 10HE0825 | 1/4-20 | 2.750" | 2.750" | .563" |
| 10HE1021 | 5/16-18 | 2.000" | 2.000" | .500" |
| 10HE1023 | 5/16-18 | 2.500" | 2.500" | .750" |
| 10HE1221 | 3/8-16 | 2.375" | 2.375" | .625" |
| 10HE1223 | 3/8-16 | 4.250" | 3.000" | 1.000" |
| 10HE1225 | 3/8-16 | 6.250" | 3.875" | 1.000" |
| 10HE1621 | 1/2-13 | 1.500" | 1.500" | 1.250" |
| 10HE1623 | 1/2-13 | 3.625" | 3.000" | 1.250" |
| 10HE1625 | 1/2-13 | 5.750" | 4.000" | 1.250" |



Ball End Fittings

Ball End Fittings are available in both 1/4-28 and 5/16-24 thread configurations. Both options are designed to be used in conjunction with the Threaded Termination Studs and Threaded Termination Turnbuckle Systems.



BALL END FITTING 316SS

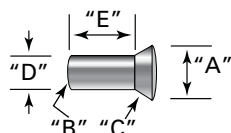
| PART NO. | THREAD SIZE | OUTSIDE DIA. |
|----------|-------------|--------------|
| 10HBE8 | 1/4-28 RH | .625" |
| 10HBE10 | 5/16-24 RH | .625" |

CHROME PLATED NAVAL BRONZE

| | | |
|---------|------------|-------|
| 15HBE8 | 1/4-28 RH | .625" |
| 15HBE10 | 5/16-24 RH | .625" |

Countersunk Cap

Countersunk Cap Fitting is designed to be used in conjunction with the Threaded Termination Studs and Threaded Termination Turnbuckle Systems when the design requires the end fittings to be flush to the outside of the end posts.



COUNTERSUNK CAP

316SS

| PART NO. | "B" THREAD | "E" LENGTH | "D" BODY DIA. | "C" ANGLE | "A" HEAD DIA. |
|----------|------------|------------|---------------|-----------|---------------|
| 10HCTST8 | 1/4-28 RH | .563" | .359" | 82° | .563" |

Dome Nuts

Dome Nuts are available in both 1/4-28 and 5/16-24 thread configurations. Both options are designed to be used in conjunction with the Threaded Termination Studs and Threaded Termination Turnbuckle Systems.



DOME NUT

316SS

| PART NO. | THREAD | OUTSIDE DIA. | THICKNESS |
|----------|------------|--------------|-----------|
| 10HDN8 | 1/4-28 RH | .563" | .250" |
| 10HDN10 | 5/16-24 RH | .750" | .281" |

304SS

| | | | |
|---------|------------|-------|-------|
| 15HDN8 | 1/4-28 RH | .563" | .250" |
| 15HDN10 | 5/16-24 RH | .563" | .250" |

SOLID DOME NUT

316SS

| PART NO. | THREAD | OUTSIDE DIA. | THICKNESS |
|----------|------------|--------------|-----------|
| 10HDN8S | 1/4-28 RH | .563" | .355" |
| 10HDN10S | 5/16-24 RH | .750" | .438" |

304SS

| | | | |
|-----------|------------|-------|-------|
| 15HDN8S | 1/4-28 RH | .563" | .313" |
| 15HDN10S | 5/16-24 RH | .563" | .313" |
| 15HDN10SL | 5/16-24 RH | .625" | .438" |

Adjust-a-Ball Fittings

The Adjust-A-Ball End Fittings are designed for most angle compensation applications when using Threaded Stud or Terminations Stud Systems. An 11/16" diameter hole in the end verticals/posts acts as a mounting socket. Flat bar applications, utilize an 11/16" outside diameter chamfer.

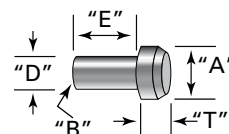


ADJUST-A-BALL

316SS

| TYPE OF FITTING | PART NO. | NOMINAL HOLE | OUTSIDE DIA. | POST HOLE SIZE |
|-----------------|----------|--------------|--------------|----------------|
| COUNTERSUNK | 10HAB101 | .375" | .750" | .688" |
| RAISED | 10HAB102 | .375" | .750" | .688" |

Termination Stud Cap

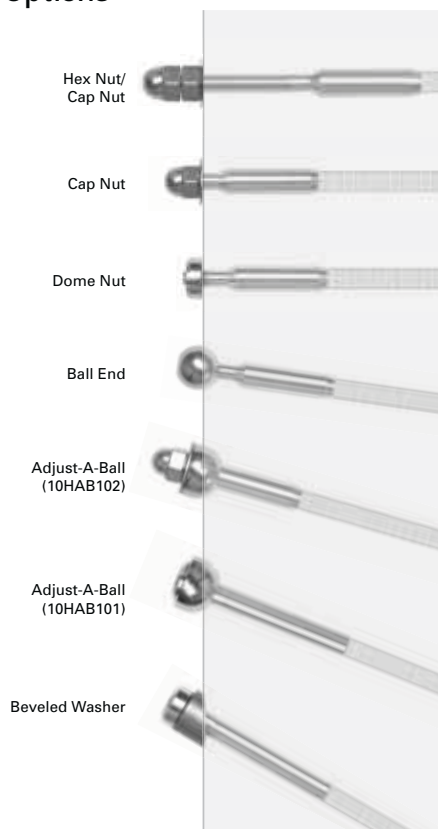


TERMINATION STUD CAP

316SS

| PART NO. | "B" THREAD | "E" LENGTH | "D" BODY DIA. | "T" CAP THICKNESS | "A" HEAD DIA. |
|----------|------------|------------|---------------|-------------------|---------------|
| 10HTST8 | 1/4-28 RH | .563" | .359" | .219 | .563" |

End Fitting Options



Beveled Washers

Beveled Washers are designed for use with many of our end fitting options without post modifications.

The designed angles are 30° through 37° — compliant with most conventional stair systems.

BEVELED WASHERS

316SS

| PART NO. | NOMINAL SIZE | OUTSIDE DIA. | BEVEL ANGLE |
|------------|--------------|--------------|-------------|
| 40HAW0830 | .250" | .500" | 30° |
| 10HAW0837 | .250" | .500" | 37° |
| 10HAW0831L | .250" | .625" | 31° |
| 10HAW0837L | .250" | .625" | 37° |
| 10HAW1031 | .313" | .625" | 31° |
| 10HAW1037 | .313" | .625" | 37° |
| 40HAW1230 | .375" | .500" | 30° |
| 10HAW1231 | .391" | .625" | 31° |
| 10HAW1237 | .391" | .625" | 37° |
| 40HAW1630 | .500" | .625" | 30° |

304SS

| | | | |
|-----------|-------|-------|-----|
| 20HAW1432 | .438" | .625" | 32° |
| 20HAW1435 | .438" | .625" | 35° |
| 20HAW1437 | .438" | .625" | 37° |
| 20HAW1832 | .531" | .750" | 32° |
| 20HAW1835 | .531" | .750" | 35° |
| 20HAW1837 | .531" | .750" | 37° |

Stainless Washers

Stainless Steel Washers offered in flat, locking and fender configurations.

FLAT WASHER

18-8SS

| PART NO. | NOMINAL SIZE | OUTSIDE DIA. |
|----------|--------------|--------------|
| 11HW6 | .199" | .442" |
| 11HW8 | .287" | .623" |
| 11HW10 | .342" | .749" |
| 11HW12 | .415" | .870" |
| 11HW14 | .484" | .916" |
| 11HW16 | .541" | 1.063" |

FENDER WASHER

18-8SS

| PART NO. | NOMINAL SIZE | OUTSIDE DIA. |
|----------|--------------|--------------|
| 11HFW8 | .287" | 1.00" |
| 11HFW10 | .342" | 1.50" |
| 11HFW12 | .415" | 1.50" |
| 11HFW16 | .541" | 2.00" |

LOCK WASHER

18-8SS

| PART NO. | NOMINAL SIZE |
|----------|--------------|
| 11HLW8 | .287" |
| 11HLW10 | .342" |
| 11HLW12 | .415" |
| 11HLW16 | .541" |

Hex Nuts

HEX NUT

18-8SS

| PART NO. | THREAD |
|----------|------------|
| 11HN6L | 10-32 LH |
| 11HN6R | 10-32 RH |
| 11HNC8L | 1/4-20 LH |
| 11HNC8R | 1/4-20 RH |
| 11HN8L | 1/4-28 LH |
| 11HN8R | 1/4-28 RH |
| 11HN10L | 5/16-24 LH |
| 11HN10R | 5/16-24 RH |
| 11HN12L | 3/8-24 LH |
| 11HN12R | 3/8-24 RH |

HEX NUT

18-8SS

| PART NO. | THREAD |
|----------|-----------|
| 11HN16L | 1/2-20 LH |
| 11HN16R | 1/2-20 RH |
| 11HN20L | 5/8-18 LH |
| 11HN20R | 5/8-18 RH |
| 11HN24L | 3/4-16 LH |
| 11HN24R | 3/4-16 RH |
| 11HN28L | 7/8-14 LH |
| 11HN28R | 7/8-14 RH |
| 11HN32L | 1.0-12 LH |
| 11HN32R | 1.0-12 RH |

Hex Lock Nuts — Nylon Insert

LOCK NUT

18-8SS

| PART NO. | THREAD |
|-----------|------------|
| 11HLN8R | 1/4-28 RH |
| 11HLNC8R | 1/4-20 RH |
| 11HLN10R | 5/16-24 RH |
| 11HLNC10R | 5/16-18 RH |

LOCK NUT

18-8SS

| PART NO. | THREAD |
|-----------|-----------|
| 11HLN12R | 3/8-24 RH |
| 11HLNC12R | 3/8-16 RH |
| 11HLN16R | 1/2-20 RH |

Stainless Cap (Acorn) Nuts

CAP (ACORN) NUT

18-8SS

| PART NO. | THREAD |
|----------|-----------|
| 11HCN6R | 10-32 RH |
| 11HCNC8R | 1/4-20 RH |
| 11HCN8R | 1/4-28 RH |

CAP (ACORN) NUT

18-8SS

| PART NO. | THREAD |
|----------|------------|
| 11HCN10R | 5/16-24 RH |
| 11HCN12R | 3/8-24 RH |
| 11HCN16R | 1/2-20 RH |

Security Pin

SECURITY PIN

18-8SS

| PART NO. | PIN SIZE | LENGTH | HEAD SIZE |
|----------|----------|--------|-----------|
| 15HSP08 | .250" | .500" | .432" |

Flush- and Surface-Mounting Ball Sockets

The Flush- and Surface-Mounting Ball Sockets, made from 316-grade stainless steel, are for use with our Ball End Fittings, allowing for a variety of uses including cable rails, decorative hangings, and floral items. Additionally, these fittings offer the ability to easily attach and detach the cable for temporary displays.

FLUSH-MOUNT BALL MOUNTING SOCKET

316SS

| PART NO. | BALL DIA. | THICKNESS | POST HOLE DIA. | CAP THICKNESS | CAP DIA. | PIVOT ANGLE | SLOT Y/N | SLOT WIDTH |
|----------|-----------|-----------|----------------|---------------|----------|-------------|----------|------------|
| 10FBCM4 | .625" | .281" | .750" | .188" | .875" | 40° | NO | — |
| 10FBCM4C | .625" | .281" | .750" | .188" | .875" | 40° | YES | .250" |

SURFACE-MOUNT BALL MOUNTING SOCKET

316SS

| PART NO. | BALL DIA. | OUTSIDE DIA. | LENGTH | DEPTH | MOUNT SCREW HOLE SIZE | PIVOT ANGLE |
|-----------|-----------|--------------|--------|-------|-----------------------|-------------|
| 10FBCFM4 | .625" | .875" | 1.000" | .813" | 1/4" | 40° |
| 10FBCMF4C | .625" | .875" | 1.000" | .813" | 6MM X 1.25 | 40° |

Stainless Steel Hardware

Clevis Pin



CLEVIS PIN 18-8SS

| PART NO. | SIZE DIA. | GRIP LENGTH |
|-----------|-----------|-------------|
| 10HCP0613 | 3/16" | .406" |
| 10HCP0816 | 1/4" | .500" |
| 10HCP1018 | 5/16" | .563" |
| 10HCP1222 | 3/8" | .688" |

Circular Ring



CIRCULAR RING 316SS

| PART NO. | RING SIZE | PIN SIZE |
|----------|-----------|---------------|
| 10HCR14 | .438" | 3/16" |
| 10HCR20 | .625" | 3/16" - 5/16" |
| 10HCR24 | .750" | 3/16" - 5/16" |
| 10HCR28 | .875" | 5/16" - 7/8" |

Cotter Pin



COTTER PIN 304SS

| PART NO. | SIZE DIA. | GRIP LENGTH |
|------------|-----------|-------------|
| 10HCRP0216 | 1/16" | .500" |
| 10HCRP0248 | 1/16" | 1.500" |
| 10HCRP0324 | 3/32" | .750" |
| 10HCRP0340 | 3/32" | 1.250" |
| 10HCRP0432 | 1/8" | 1.000" |
| 10HCRP0480 | 1/8" | 2.500" |
| 10HCRP0496 | 1/8" | 3.000" |
| 10HCRP0540 | 5/32" | 1.250" |
| 10HCRP0648 | 5/32" | 1.500" |

Button Head Allen Screw



BUTTON HEAD ALLEN SCREW 18-8SS

| PART NO. | THREAD | LENGTH |
|----------|---------|--------|
| 11HBS8 | 1/4-28 | .500" |
| 11HBS10 | 5/16-24 | .500" |
| 11HBS12 | 3/8-24 | .750" |

Pan Head Philips Screw



PAN HEAD PHILIPS SCREW 18-8SS

| PART NO. | THREAD | LENGTH |
|----------|---------|--------|
| 11HPSC08 | 1/4-20 | .750" |
| 11HPSC10 | 5/16-18 | 1.000" |
| 11HPSC12 | 3/8-16 | 1.250" |

Lag Bolt



LAG BOLT 18-8SS

| PART NO. | SIZE | LENGTH |
|-----------|-------|--------|
| 11HLB832 | 1/4" | 1.000" |
| 11HLB848 | 1/4" | 1.500" |
| 11HLB880 | 1/4" | 2.500" |
| 11HLB896 | 1/4" | 3.000" |
| 11HLB1048 | 5/16" | 1.500" |
| 11HLB1080 | 5/16" | 2.500" |

LAG BOLT 18-8SS

| PART NO. | SIZE | LENGTH |
|------------|------|--------|
| 11HLB1248 | 3/8" | 1.500" |
| 11HLB1264 | 3/8" | 2.000" |
| 11HLB1280 | 3/8" | 2.500" |
| 11HLB12196 | 3/8" | 3.000" |
| 11HLB12112 | 3/8" | 3.500" |
| 11HLB12128 | 3/8" | 4.000" |
| 11HLB12160 | 3/8" | 5.000" |
| 11HLB12192 | 3/8" | 6.000" |

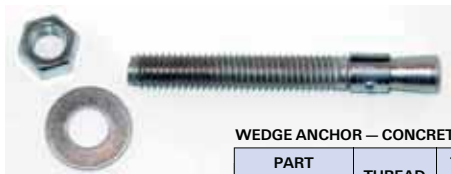
Wedge Bolt



WEDGE BOLT — CONCRETE, MASONRY 410SS

| PART NO. | SIZE | LENGTH |
|-----------|------|--------|
| 11HWB856 | 1/4" | 1.750" |
| 11HWB1280 | 3/8" | 2.500" |
| 11HWB1296 | 3/8" | 3.000" |

Wedge Anchor



WEDGE ANCHOR — CONCRETE 304SS

| PART NO. | THREAD | THREAD LENGTH | OVERALL LENGTH |
|------------|--------|---------------|----------------|
| 11HWA8104 | 1/4-20 | 2.250" | 3.250" |
| 11HWA12112 | 3/8-16 | 2.375" | 3.500" |
| 11HWA12160 | 3/8-16 | 3.125" | 5.000" |

Drop-in Anchor



DROP-IN ANCHOR — CONCRETE 316SS

| PART NO. | THREAD |
|----------|--------|
| 11HDAS8 | 1/4-20 |
| 11HDAS12 | 3/8-16 |
| 11HDAS16 | 1/2-13 |

STEEL

| PART NO. | THREAD |
|----------|--------|
| 11HDAC8 | 1/4-20 |
| 11HDAC12 | 3/8-16 |
| 11HDAC16 | 1/2-13 |

Drop-in Anchor Tool



DROP-IN ANCHOR TOOL STEEL

| PART NO. | THREAD |
|----------|--------|
| 11TDA8 | 1/4-20 |
| 11TDA12 | 3/8-16 |
| 11TDA16 | 1/2-13 |

Hex Cap, Chamfer

Designed to put the final touch anywhere 3/8" hardware has been used for mounting. These easy-to-install, aesthetic caps cover the head of 3/8" lags or the unattractive concrete wedge anchor.



HEX CAP, CHAMFER

316SS

| PART NO. | SIZE | OUTSIDE DIA. | INSIDE DEPTH |
|----------|------|--------------|--------------|
| 50HLC12 | 3/8" | .750" | .250" |
| 50HBC12 | 3/8" | .750" | .350" |



Flat Head Philips Screw



FLAT HEAD PHILIPS SCREW

18-8SS

| PART NO. | SIZE | LENGTH |
|-----------|------|--------|
| 11HFS624 | #10 | .750" |
| 11HFS732 | #12 | 1.000" |
| 11HFS824 | 1/4" | .750" |
| 11HFS832 | 1/4" | 1.000" |
| 11HFS848 | 1/4" | 1.500" |
| 11HFS856 | 1/4" | 1.750" |
| 11HFS864 | 1/4" | 2.000" |
| 11HFS896 | 1/4" | 3.000" |
| 11HFS8128 | 1/4" | 4.000" |



Stainless Steel Spacers

Used between two structural steel posts or flat bars for a "double end post" type construction. .970" length.



STAINLESS STEEL SPACERS

304SS

| PART NO. | OUTSIDE DIA. | WALL THICKNESS | USE WITH RECEIVERS & WELDED RECEIVERS: |
|----------|--------------|----------------|--|
| 20HSPC4 | 5/8" | .083" | 1/8" and 3/16" dia. cable |
| 20HSPC8 | 3/4" | .095" | 1/4" dia. cable |



Cable



Sizes offered. Seven sizes of cable are offered for the CAI Cable Railing System: 1/8", 5/32", 3/16", 1/4", 5/16", 3/8", and 1/2".




Cable construction. For most applications, we recommend 1x19 construction, type 316 stainless steel cable. 1x19 construction cable is engineered to hold static loads without stretching, and it is relatively stiff. Other cable constructions can be used, such as 7x7 or 7x19, but they are rarely recommended because of their elevated levels of stretch and lower breaking strengths in comparison to 1x19 construction (see chart).

Swaging — attaching fittings to cable.

Our swageless fittings do not require swaging, since the hardware is attached to the cable by hand. Other CAI hardware is swaged using hydraulic presses that apply up to 55 tons of pressure to swage the fittings. CAI portable swagers are available for purchase or rent, or in many cases the factory can supply cable with fittings attached.

Cable coating. Cable can be special ordered with a PVC coating in any standard (PMS) color. If PVC coated cable is to be used with metal framed railings, special caution should be used because hole specifications for frame

components can change and, in some cases, special hardware may be required. If you are interested in using coated cable, please contact the factory for any necessary special hardware or design specifications.

| CABLE | | | |
|--|---|---|---|
| 316SS | | | |
| MINIMUM BREAKING STRENGTHS (in Lbs.) FOR TYPE 316 STAINLESS STEEL CABLE | | | |
| CABLE DIA. | 1x19 | 7x7 | 7x19 |
| 1/8" | 1,780 | 1,360 | 1,300 |
| 5/32" | 2,800 | 1,860 | 2,000 |
| 3/16" | 4,000 | 3,300 | 2,900 |
| 1/4" | 6,900 | 5,500 | 4,900 |
| 5/16" | 10,600 | 7,600 | 7,600 |
| 3/8" | 14,800 | 11,700 | 11,000 |
| 1/2" | 27,000 | n/a | 20,200 |
| |  |  |  |
| | stiff | flexible | very flexible |

Many cable sizes are available in
Type 304 Stainless Steel and Galvanized Steel.

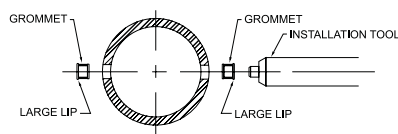


Cable Grommets

Cable grommets are offered for popular cable diameters of 1/8", 3/16" and 1/4". They help prevent rust in exterior applications, or elsewhere where moisture is a factor, by providing a barrier between the cable and the painted

or powder-coated surface through which the cable is drawn when being installed. Cable grommets are installed (after the paint or powder coating is applied) into holes in intermediate posts, cable braces and, in the case of the Invisiware® radius ferrule, Push-Lock™, and Pull-Lock™ fittings into the end post holes through which the cable exits. They are offered in black UV-resistant Delrin®.

Delrin is a registered trademark of
E.I. DuPont de Nemours & Co.



CABLE GROMMETS

Order cable grommets by diameter of cable and post through which the cable will be drawn.

| CABLE DIA. | INTERMEDIATE POST MATERIAL (Not slotted for stairway) | | | END POST MATERIAL, USING RADIUS FERRULE, PUSH-LOCK OR PULL-LOCK FITTINGS | | INTERMEDIATE POST MATERIAL SLOTTED FOR STAIRWAY PITCH UP TO 37° | | |
|--------------|--|---|---|--|---|--|---|---|
| | Schedule 40 1-1/4" 1-1/2" 2" PIPE | SQUARE or RECT. TUBE WITH .120" WALL | 1/4" CABLE BRACE or SQUARE or RECT. TUBE WITH .250" WALL | Schedule 80 1-1/4" 1-1/2" 2" PIPE | SQUARE or RECT. TUBE WITH .250" WALL | Schedule 40 1-1/4" 1-1/2" 2" PIPE | SQUARE or RECT. TUBE WITH .120" WALL | 1/4" CABLE BRACE or SQUARE or RECT. TUBE WITH .250" WALL |
| 1/8" & 3/16" | 20HG41 | 20HG42 | 20HG44 | 20HG43 | 20HG44 | 20HGS41 | 20HGS42 | 20HGS44 |
| 1/4" | 20HG81 | 20HG82 | 20HG84 | 20HG83 | 20HG84 | 20HGS81 | 20HGS82 | 20HGS84 |

*Cable grommets not required with Push-Lock or Pull-Lock fittings used in 1-1/4" Schedule 80 pipe if pipe is counterbored.

Cable Grommets are available in lots of 50 each. Custom grommets available — contact us for details. For Grommet Installation Tools, see page 37.

Railing Components

Drill Guide

Use the drill guide to drill your pilot holes. Clamp the guide to post and drill. Subsequent drills will follow pilot holes. When ordering, allow space for clamps. A 6" overall-length drill is included. **STEEL**



Contact us for **DRILL GUIDE ORDER FORM** or visit our website.

Cable Brace

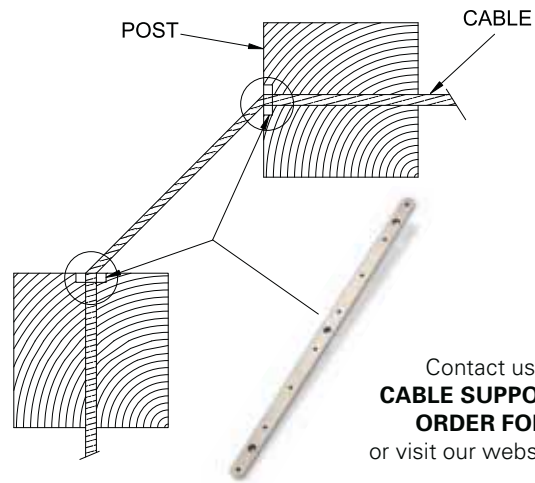
1/4" x 1" cable braces are used to support the cables between end or intermediate posts to keep the cable from flexing excessively when a load is applied. Cable braces attach to the top rail and to the lower mounting surface (a bottom rail or the deck). Available in mill finish carbon steel or #4 finish stainless steel. Also available for stairs. **STEEL 304SS**



Contact us for **CABLE BRACE ORDER FORM** or visit our website.

Cable Support

1/4" x 1" flat bar cable supports are used to prevent the cable from biting into the wood post where the cable enters or exits a wooden post at an angle, when the cables are tensioned. Available in mill finish carbon steel or #4 finish stainless steel. **STEEL 304SS**

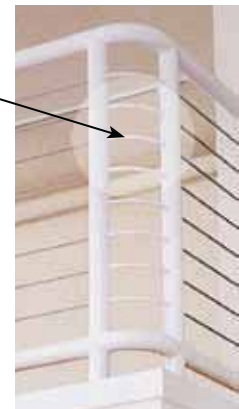


Contact us for **CABLE SUPPORT ORDER FORM** or visit our website.

Corner Section Tubes

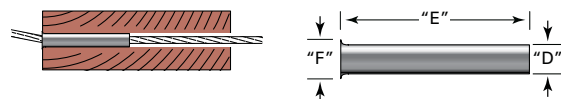
Available in carbon or stainless steel. **STEEL 304SS**

Order **CORNER SECTION TUBE** and specify carbon or stainless, cable diameter being used and tube radius:
3.90" radius
4.00" radius
6.19" radius



Stainless Steel Post Protector Tube

The post protector tube is inserted into a wood post where the cable enters/exits the post at an angle to keep the cable from biting into the wood.



POST PROTECTOR TUBE

304SS

| PART NO. | NOMINAL SIZE | "D" BODY DIA. | "E" LENGTH | "F" FLANGE |
|----------|--------------|---------------|------------|------------|
| 11HCST8 | .206" | .250" | 1.600" | .344" |
| 11HCST8S | .206" | .250" | .875" | .500" |
| 11HCST10 | .273" | .313" | 1.600" | .421" |
| 11HCST12 | .335" | .375" | 1.600" | .500" |

Cable Brace Floor Plates

For mounting cable braces to top or bottom rail, stair, or deck.



CABLE BRACE FLOOR PLATES

STEEL 304SS

| PART NO. | MATERIAL | DIMENSIONS |
|------------|--------------------------------|------------------------|
| 50HCBP0101 | Mill Finish Carbon Steel | 2-1/4" x 1-1/4" x 1/4" |
| 50HCBP0201 | Mill Finish Stainless Steel | |
| 50HCBP0301 | #4 Finish Stainless Steel | |
| 50HCBP0111 | Mill Finish C.S. (Stair Slope) | |
| 50HCBP0211 | Mill Finish S.S. (Stair Slope) | |
| 50HCBP0311 | #4 Finish S.S. (Stair Slope) | |

Tools and Maintenance

Cable Cutter

For burr-free cutting of cable.

Order **82T07**
for light-duty use to cut 1/8" cable

Order **82T13**
to cut cable 1/4" dia. and under

Order **82T20**
to cut cable up to 3/8" dia.



Cable Grippers

Locking pliers with machined jaws to grip cable, without damage, and prevent the cable from turning while tensioning.

Order **20TCG4**
for 1/8", 3/16", 1/4" and 3/8" cable
Order **50TCG1** for 1/8" and 3/16" cable



Cable Tension Gauges

Check the tension on your cables with these easy-to-use gauges.

Order **11TCTG04**
for cable diameter of 1/8", 3/16" and 1/4"

Order **11TCTG08**
for cable diameter of 1/4" through 3/8"



Hanger Bolt Driver

Use to install Adjust-A-Body® with Hanger Bolt tensioners. Makes driving hanger bolts fast and easy.

Order **20TLB4N**
for 1/8" and 3/16" dia. cable



Cut-off Tool

Used to cut cable flush with the end of Pull-Lock™ fittings, and to cut excess threads off stud-type tensioners. Includes mandrel and two cut-off wheels.

Order **11TCUTKIT**



Pre-Tensioner

A Pre-tensioner can be used when installing longer runs of cable. It allows you to tension the cable through the last intermediate post, making it easy to connect to the last (end) post.

When renting installation tools, Pre-tensioners must be requested.

Order **20TPT250**



Pre-Tensioner Locking Pliers

Special Pre-tensioner Locking Pliers are used with the pre-tensioner. Each cable diameter requires individual pliers which must be ordered separately.

Order **20TCG-PT4** for 1/8" cable,
Order **20TCG-PT6** for 3/16" cable
Order **20TCG-PT8** for 1/4" cable

Stainless Steel Cleaner and Protectant

Dissolves minor corrosion, then leaves a protective coating that lasts for months. Includes an 8-oz. spray-on rust and stain remover and a 4-oz. bottle of protectant.

Order **83MT94RF8** Larger sizes available.



Handy Crimp Tool

Handy crimp tool featuring 4 cavities for use with up to 5/32" oval sleeves and 1/8' - 3/16" lines of Handy Crimp cable hardware. Other size single cavity and multi-cavity tools available as special order.

This tool is required for hardware marked with **CRIMP**



"C" groove: 1/8" cable

"G" groove: 3/16" cable

Order **11THCT1**

Cables can be provided pre-swaged with fittings attached ready to install, or you can cut the cables and swage the fittings in your shop or on the job site. Tools and equipment for cutting the cables and swaging the fittings can be rented or purchased from the factory.

Air Over Hydraulic Pump

Air driven. Powers Model 610 or 650 Swager. Requires an air compressor capable of delivering at least 5.4 c.f.m. at 90 p.s.i. and a minimum 15-gallon tank. Minimum 1/4" I.D. air hose with a 1/4" male pipe thread required (not included).

Order **20THYDPUMP**



Model 610 Swager

Hand held. For swaging 1/8" and 3/16" diameter cable fittings. Use with Air Over or Electric Hydraulic Pump.

Order **20T610HEAD**



Shipping Container/ Tool Box

With compartments for cable cutting and installation tools.

Order **20T610BOX**



Electric Hydraulic 120V Pump

Increases swaging speed versus the Air Over Hydraulic Pump.

Order **20TELECPUMP**



Model 650 Swager

For swaging 1/8" through 3/8" diameter cable fittings. Use with Air Over or Electric Hydraulic Pump.

Order **20T650HEAD**



Radius Ferrule / Clip-on Stop Gauge

Use this gauge to confirm that the radius ferrules and clip-on stops have been properly swaged. The fitting is properly swaged if it fits into the appropriate slot.

Order **20TRFG**



Shipping Container/ Tool Box

With compartments for cable cutting and installation tools.

Order **20T650BOX**



Grommet Installation Tool Set

Needed to properly install grommets. Place grommet on tool, align grommet over hole, and tap lightly with a hammer.

Order **20TGTS4** Can be purchased separately.



Cable Release

Releases cable from Push-Lock™ and Pull-Lock™ type fittings before cables are tensioned.

Order **20TPL4**





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