Atkore™

Talon® Cable Cleats

Installation Guide

Revision 02/08/2024

Talon® Cable Cleats

PRE-INSTALLATION

Read all instructions prior to installation and contact Atkore – Talon with any questions. These instructions are general in nature and may not be suitable for every installation. Follow all safety measures required for electrical installation (e.g. de-energize cables before installing or removing cable cleats).

Recommended tools and equipment:

- Work gloves
- Safety glasses
- Hollow-shaft nut driver
- Ratcheting socket wrench
- Calibrated torque wrench
- 6-point deep sockets
- Tappet wrench

Thread galling is a condition that can affect stainless steel hardware. To mitigate the risk of thread galling:

- Threads should be clean, dry, and cool
- Turn flange nuts slowly
- Do not apply excessive pressure to flange nuts
- Do not use an impact wrench
- Use suitable anti-galling compound

For additional information on thread galling, contact Atkore – TALON.

TABLE 1 - RECOMMENDED TORQUE VALUES

Part	Torque Value	Socket Size	Comments
T1 Cleat	60 to 72 in.- lbs.	½ in.	1 to 3 turns after hand-tightening
T3 Cleat	36 to 60 in.- lbs.	½ in. (9⁄16 in. for T306)	1 to 2 turns after hand-tightening
Ø 5⁄16 in. jam nut	132 in.- lbs. max	½ in.	Do not apply additional torque to flange nuts
Ø ⅜ in. jam nut	236 in.- lbs. max	9⁄16 in	Do not apply additional torque to flange nuts

Torque values are based on clean, dry, and cool threads.

TABLE 2 - HARDWARE KITS FOR STRUT:

Part	Material	Included
MT KIT H4_3/8X2	304 Stainless Steel	(1) ⅜-16 Hex Cap Screw • (1) ⅜ Flat Washer • (1) ⅜ Spring Nut
MT KIT H6_3/8X2	316 Stainless Steel	(1) ⅜-16 Hex Cap Screw • (1) ⅜ Flat Washer • (1) ⅜ Spring Nut

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INSTALLING CABLE CLEATS ON LADDER-TYPE CABLE TRAYS

If liners are used, view installation guidance before proceeding to Step 1.[1]

STEP 1: INSTALLING THE BASE

Position the cable cleat base below the cable tray rung as depicted in Figure 1, such that the cleat touches the bottom of the cable(s) or liners, if used.

STEP 2: INSTALLING THE CAP

Place the cable cleat cap above the cable(s) or top liner, if used, and align with the captive stainless steel gripping bolts as depicted in Figure 2. If the cables are similarly sized, the gap between the base and cap should remain equal on all corners during installation. When the cables and cleat are properly matched, an air gap will remain between the cable cleat base and cap after installation.

STEP 3: TIGHTENING THE CLEAT

For straight cables, i.e., aligned with the longitudinal cable cleat axis, hand-tighten each flange nut after it engages the surface of the bolt pedestal on the cable cleat cap. Then, tighten each flange nut using the torque guidelines in Table 1. Ensure the bolt heads remain fully seated in the hex recesses of the cable cleat base. The pre-installed cable cleat rung spacer, if used, will compress slightly during installation.

For plexed cables or cables with larger conductors that retain geometrical "memory" from the reel, additional torque may be required.

DO NOT OVER-TIGHTEN GRIPPING HARDWARE. Neither the cables, nor the cleats should be deformed, and the cables should not bulge at either end of the cleat. The flange nuts may slightly impress the bolt pedestal surfaces after tightening.

For additional security, jam nuts or a suitable thread locking compound may be used. When using jam nuts, tighten all flange nuts first. Then, hold each previously tightened flange nut in position using a tappet wrench and tighten the jam nut against the flange nut until the desired torque value is reached. **DO NOT APPLY ADDITIONAL TORQUE TO THE FLANGE NUTS.** General torque guidelines for jam nuts are provided for reference in Table 1.

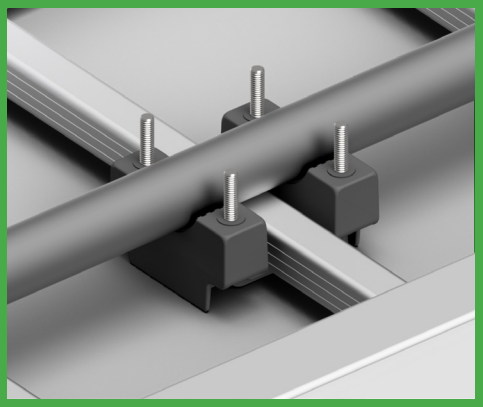

Figure 1

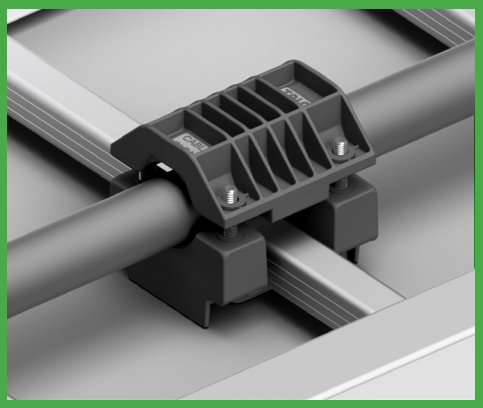

Figure 2

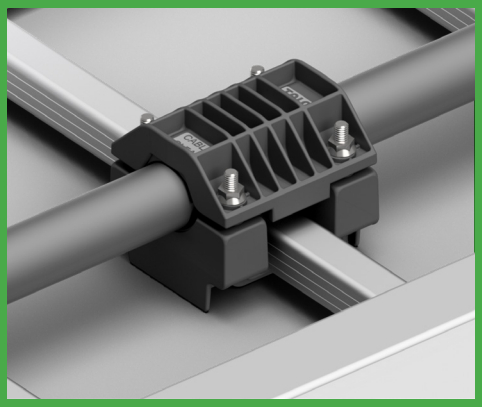

Figure 3

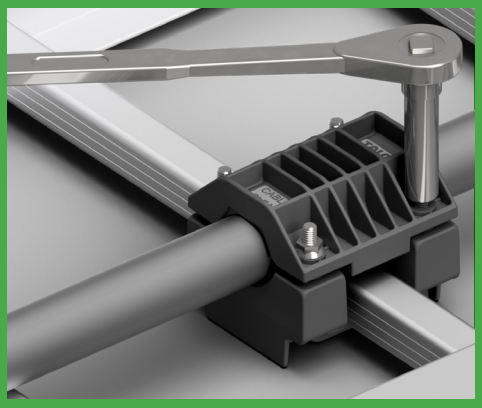

Figure 4

[1]If liners are required, position one liner below the cable(s) and the other above the cable(s). If the liners are different widths, the narrower liner should be positioned below the cable(s) and the wider liner should be above the cable(s). The liners should be centered in the cable cleat and extend beyond the front and back of the cable cleat by at least 6.35 mm (0.25 in)

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INSTALLING CABLE CLEATS ON STRUT

Order strut mounting hardware kit separately. Part numbers are listed in Table 2.

If liners are used, view installation guidance before proceeding to Step 1.[1]

STEP 1: MOUNTING THE BASE

Place mounting bolt through flat washer and through each auxiliary mounting hole from the inside of the cable cleat base,depicted in Figure 5. Hand-tighten threaded hardware, then tighten to the torque values listed in Table 1. All cleat bases except T303 have two mounting holes; T303 has one. For additional security, jam nuts or a suitable thread locking compound may be used. Torque guidelines for jam nuts are provided in Table 1. Lay cable into the cleat base with liners, if used.

STEP 2: INSTALLING THE CAP

Place the cable cleat cap above the cable(s) or top liner, if used and align with the captive stainless steel gripping bolts as depicted in Figure 7. If the cables are similarly sized, the gap between the base and cap should remain equal on all corners during installation. When the cables and cleat are properly matched, an air gap will remain between the cable cleat base and cap after installation.

STEP 3: TIGHTENING THE CLEAT

For straight cables, i.e., aligned with the longitudinal cable cleat axis, hand tighten each flange nut after it engages the surface of the bolt pedestal on the cable cleat cap. Then, tighten each flange nut using the torque guidelines in Table 1. Ensure the bolt heads remain fully seated in the hex recesses of the cable cleat base. The pre-installed cable cleat rung spacer, if used, will compress slightly during installation.

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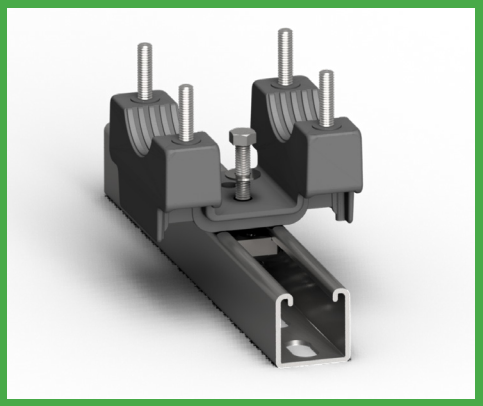

Figure 5

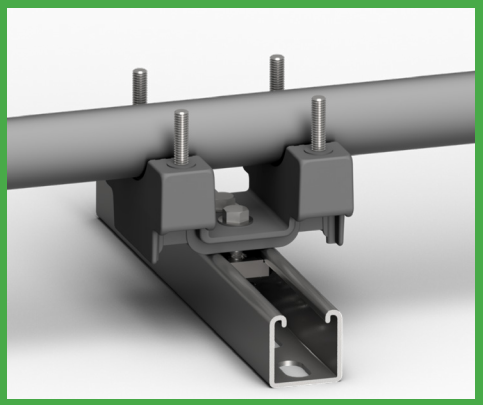

Figure 6

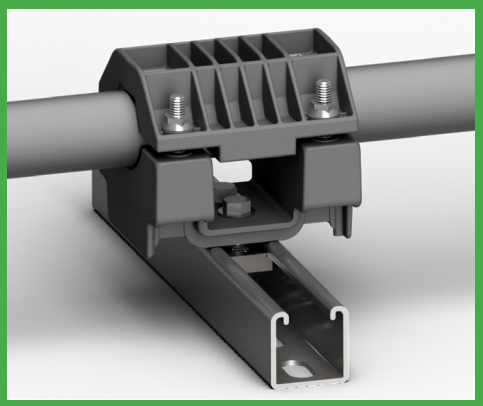

Figure 7

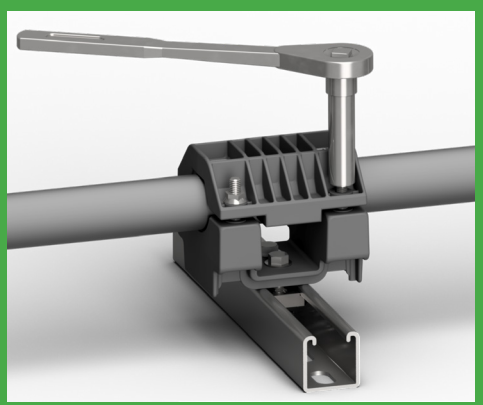

Figure 8

[1]If liners are required, position one liner below the cable(s) and the other above the cable(s). If the liners are different widths, the narrower liner should be positioned below the cable(s) and the wider liner should be above the cable(s). The liners should be centered in the cable cleat and extend beyond the front and back of the cable cleat by at least 6.35 mm (0.25 in)