Item Catalogue

NUPCO CODE: 4224210003700 | SN: 1333

NUPCO ITEM DESCRIPTION

SCREW, LOCKED FOR LCP ANATOMIC CRONOID PLATING, TITANIUM, ASSORTED TYPES AND SIZES REQUESTED BY END USER

VENDOR PRODUCT DESCRIPTION

Elbow Plating System 2.7 mm locking screws for coronoid plates

SKU CODES INCLUDED FOR THIS NUPCO CODE

30-0324
30-0325
30-0326
30-0327
30-0328
30-0329
30-0330
30-0331
30-0332
30-0333
30-0334
30-0335
30-0336

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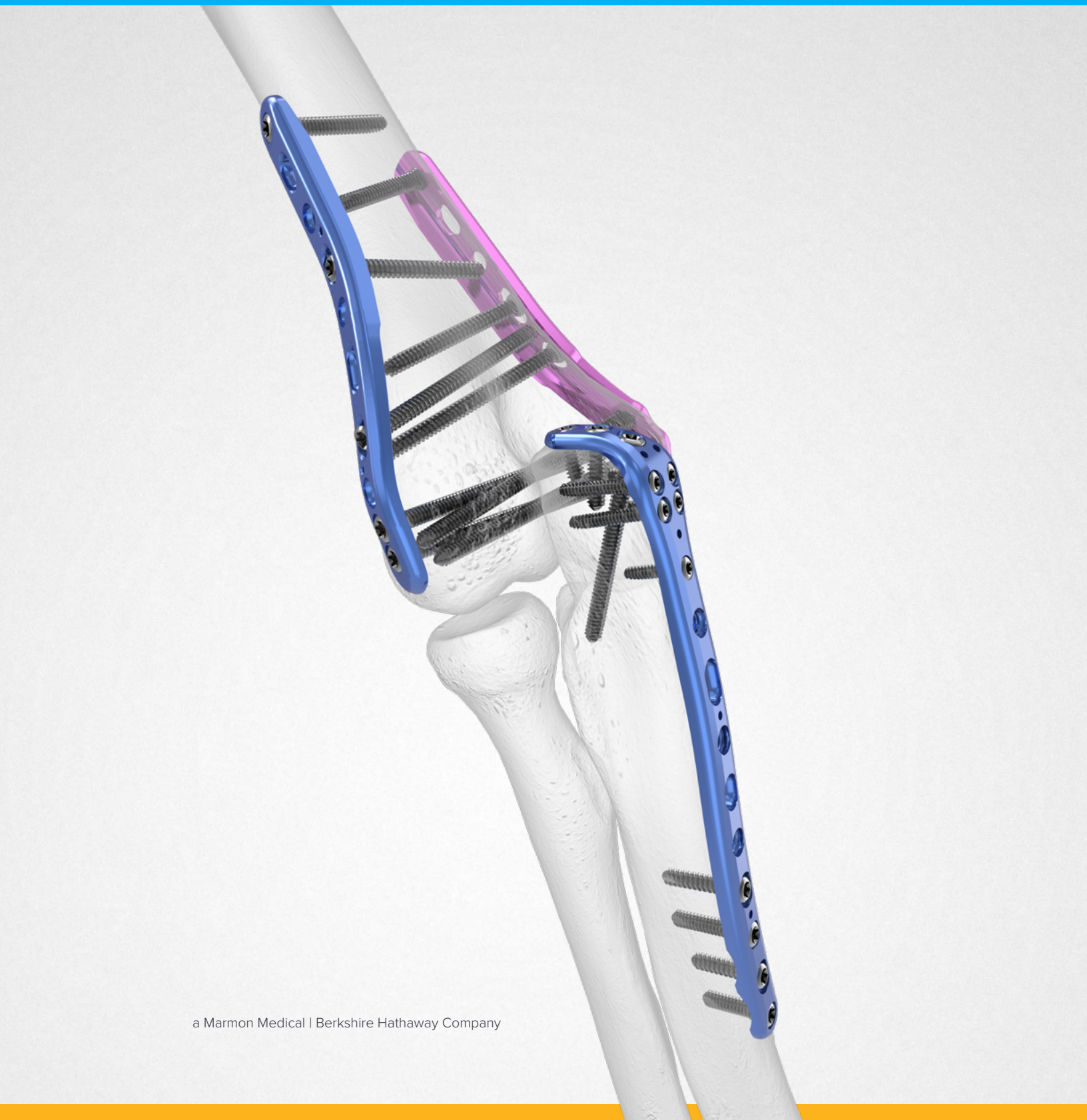
acumed®

Elbow Plating System

Surgical Technique



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Coronoid Plates Surgical Technique

Shawn W. O'Driscoll, MD, PhD

Figure 36

1 Fracture Fragment Fixation

Expose the coronoid and ridge of the ulna through an anteromedial approach. Reduce and provisionally hold the fragments with smooth .045" x 6" ST Guide Wires (WS-1106ST) functioning as K-wires.

Figure 37

2 Plate Placement and Provisional Fixation

Apply the Coronoid Plate (70-041X) so that the two prongs on the proximal section grasp and buttress the anteromedial facet of the coronoid. If the sublime tubercle, on which the anterior bundle of the medial collateral ligament (MCL) inserts, is also fractured (Anteromedial Subtype III fracture), the offset screw hole should sit over that fragment for proper screw position. The distal portion of the plate should extend along the ridge on the anteromedial side of the ulna. Several .045" K-wires may be used for provisional plate fixation through the K-wire holes in the plate.

Note: Use caution when handling the plate as it has sharp prongs. Repeated and excessive bending may damage the plate, causing it to not fit or function as intended.

Note: Plates designed for use on the left arm are blue. Plates designed for use on the right arm are green.

Screw Diameter	Drill Diameter
2.7 mm	2.0 mm

Coronoid Plates Surgical Technique [continued]

Figure 38

3 Initial Central Nonlocking Screw

The first screw inserted is a 2.7 mm Nonlocking Hexalobe Screw (30-03XX) or 2.7 mm Nonlocking Hexalobe CoCr Screw (3061-270XX) into hole #1, which is the “central” plate hole. Drill using the 2.0 mm Quick Release Drill (80-0318) and measure for the screw length using the Depth Gauge 6–65 mm (80-0623). Connect the T8 Stick Fit Hexalobe Driver (80-0759) to the Medium Ratcheting Driver Handle (80-0663) and insert the screw. When determining the screw lengths, make sure to compensate for any expected plate deformation if the bend does not fully seat the plate against the bone. As the screw is tightened, the plate will flex and contour to the bone. If the outer proximal hole begins to bend outward, tighten this first screw only partially, insert the most proximal screw, then go back to fully seat the central screw. Seating this screw may also cause the prongs on the proximal portion of the plate to buttress the coronoid and further compress the plate to the bone.

Note: Tapping the bone prior to screw insertion with the Bone Tap for 2.7 mm Hexalobe Screws (80-0625) may be needed for patients with dense bone (see Tapping Instructions on page 21).

Figure 39

4 Coronoid Fixation

To fill the proximal 2.7 mm nonlocking hexalobe screw holes (holes #2 and #3), use the same technique as in Step 3. The offset screw hole, #4, is optional and can be filled with a nonlocking screw if the fracture extends to the sublime tubercle. As these nonlocking screws are inserted, the plate will continue to contour to the bone.

Note: If K-wires were inserted for provisional fixation, they should be removed prior to drilling and inserting screws into the proximal portion of the plate.

Note: Use of fluoroscopy is recommended to verify the trajectory of the nonlocking screws to ensure they avoid the articular surface.

Coronoid Plates Surgical Technique [continued]

Figure 40

5 Insert Remaining Locking Screws

To insert the 2.7 mm Locking Hexalobe Screws (30-03XX) or 2.7 mm Locking Hexalobe CoCr Screws (3060-270XX), thread the 2.0 mm Locking Drill Guide (80-0621) into each distal plate hole (#5 and #6) and drill with the 2.0 mm Quick Release Drill (80-0318). Insert the locking screws with the T8 Stick Fit Hexalobe Driver (80-0759) and the Medium Ratcheting Driver Handle (80-0663). Nonlocking screws can be used at the surgeon's discretion.

Note: Care should be taken not to overtighten the screws or apply excess torque on the driver.

Figure 41

6 Postoperative Protocol

Note: The following protocol may be replaced with an alternative protocol at the performing surgeon's discretion.

Immediately after closure, the elbow is placed in a bulky noncompressive Jones dressing with an anterior plaster slab to maintain the elbow in a relatively extended position and the upper extremity is kept elevated for three days, bringing it down from the elevated position each hour for 5–10 minutes to permit adequate perfusion. The initial rehabilitation is planned according to the stability of the elbow, the security of fracture fixation, and the extent of soft-tissue damage.

7 Optional: Implant Removal Instructions

To remove a Coronoid Plate, use a T8 Stick Fit Hexalobe Driver (80-0759) and a Quick Release T-Handle (MS-T1212) to remove all screws before extracting the plate. Referencing the Screw Removal Brochure (SPF10-00) may aid in implant extraction if difficulty is experienced.

Caution: 2.7 mm Hexalobe locking & nonlocking CoCr screws (3060-270XX, 3062-350XX); (3061-270XX, 3063-350XX) are not compatible with Acumed Screw Removal system.

Ordering Information [continued]

Screws

2.7 mm Locking Hexalobe Screws

2.7 mm x 8 mm Locking Hexalobe Screw	30-0324
2.7 mm x 10 mm Locking Hexalobe Screw	30-0325
2.7 mm x 12 mm Locking Hexalobe Screw	30-0326
2.7 mm x 14 mm Locking Hexalobe Screw	30-0327
2.7 mm x 16 mm Locking Hexalobe Screw	30-0328
2.7 mm x 18 mm Locking Hexalobe Screw	30-0329
2.7 mm x 20 mm Locking Hexalobe Screw	30-0330
2.7 mm x 22 mm Locking Hexalobe Screw	30-0331
2.7 mm x 24 mm Locking Hexalobe Screw	30-0332
2.7 mm x 26 mm Locking Hexalobe Screw	30-0333
2.7 mm x 28 mm Locking Hexalobe Screw	30-0334
2.7 mm x 30 mm Locking Hexalobe Screw	30-0335
2.7 mm x 32 mm Locking Hexalobe Screw	30-0336
Hexalobe Screw Caddy	80-0629

2.7 mm Nonlocking Hexalobe Screws

2.7 mm x 8 mm Nonlocking Hexalobe Screw	30-0343
2.7 mm x 10 mm Nonlocking Hexalobe Screw	30-0344
2.7 mm x 12 mm Nonlocking Hexalobe Screw	30-0345
2.7 mm x 14 mm Nonlocking Hexalobe Screw	30-0346
2.7 mm x 16 mm Nonlocking Hexalobe Screw	30-0347
2.7 mm x 18 mm Nonlocking Hexalobe Screw	30-0348
2.7 mm x 20 mm Nonlocking Hexalobe Screw	30-0349
2.7 mm x 22 mm Nonlocking Hexalobe Screw	30-0350
2.7 mm x 24 mm Nonlocking Hexalobe Screw	30-0351
2.7 mm x 26 mm Nonlocking Hexalobe Screw	30-0352
2.7 mm x 28 mm Nonlocking Hexalobe Screw	30-0353
2.7 mm x 30 mm Nonlocking Hexalobe Screw	30-0354
2.7 mm x 32 mm Nonlocking Hexalobe Screw	30-0355

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acumed®

Small Fragment Base Set

Acumed System Compatibility Indicator

Acumed Variable Angle Screw Compatible

Surgical Technique

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Variable Angle Screw Surgical Technique [continued]

2 Drill

For 2.7 mm variable angle hexalobe screws, drill through the selected 2.0 mm VA Drill Guide with the 2.0 mm Quick Release Drill w/ Depth Marks (80-2378) (figures 15 and 16).

For 3.5 mm variable angle hexalobe screws, drill through the selected 2.8 mm VA Drill Guide with the 2.8 mm Quick Release Drill w/ Depth Marks (80-2379).

Use fluoroscopy to ensure the desired angle and depth have been achieved.

Caution: Avoid excessive re-drilling, particularly in poor quality bone, to prevent weakening of the screw-to-bone interface.

Warning: Excessive bending or contact with implants during use may cause the drill to be damaged or broken.

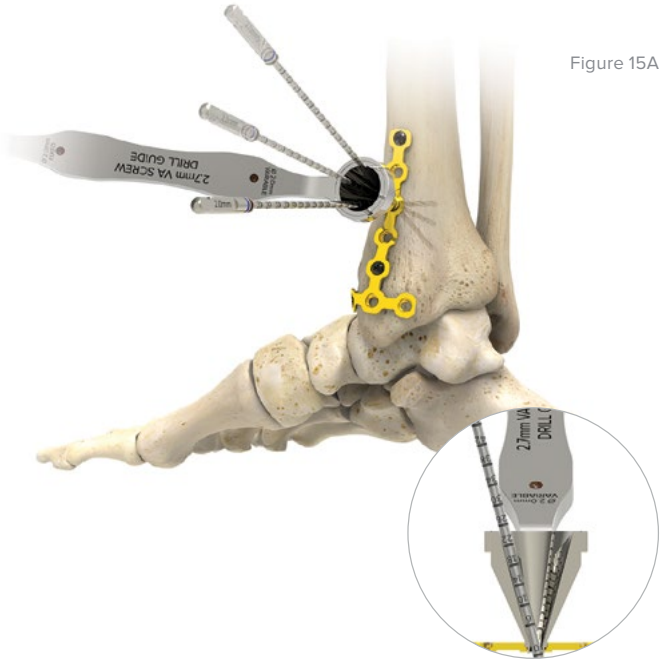


Figure 15A

Figure 15B

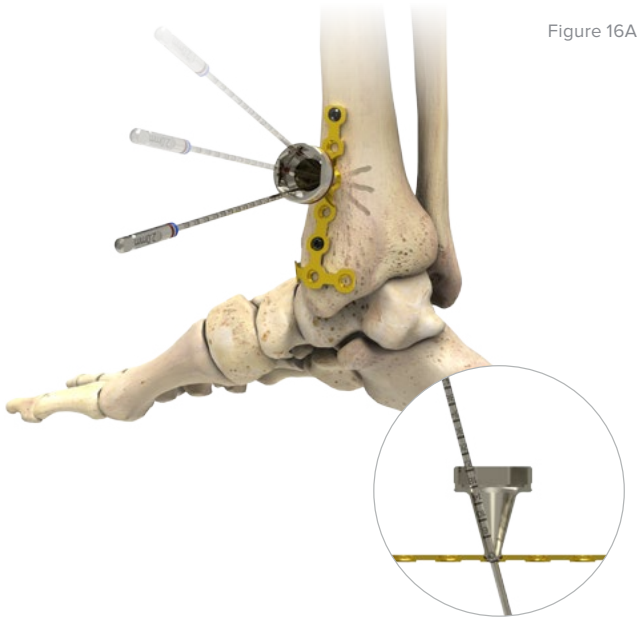


Figure 16A

Figure 16B

2.0 mm Quick Release Drill w/ Depth Marks (80-2378)

2.8 mm Quick Release Drill w/ Depth Marks (80-2379)

Variable Angle Screw Surgical Technique [continued]

Figure 17A

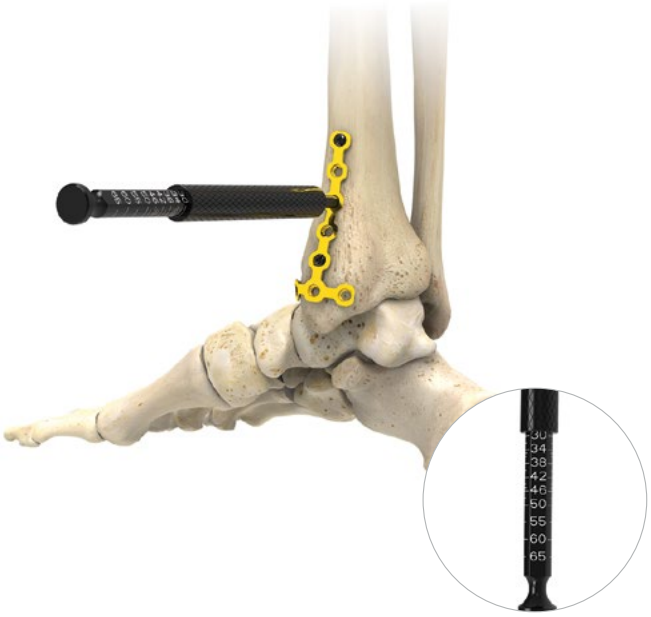


Figure 17B

3 Measure Screw Length

Use the Depth Gauge (80-2496) to measure through the drilled hole to determine the correct length of screw.

Note: The cone side of the VA drill guides may not be used to determine screw length.

Depth Gauge
(80-2496)

Variable Angle Screw Surgical Technique [continued]

4 Insert Variable Angle Screw

Note: Final tightening of the 2.7 mm and 3.5 mm variable angle hexalobe screws must be done manually and not under power. The Torque Limiting Quick Connect ensures a consistent insertion torque to provide a uniform screw-plate interface and may prevent overtightening of the screw. See below for the torque limit for each screw.

To insert a 2.7 mm variable angle hexalobe screw, assemble the 1.70 N•m Torque Limiting Quick Connect (80-2366) to the Handle for Torque Limiting Quick Connect (80-2368). Connect the T8 Stick Fit Hexalobe Driver (80-0759) to the Torque Limiting Quick Connect assembly.

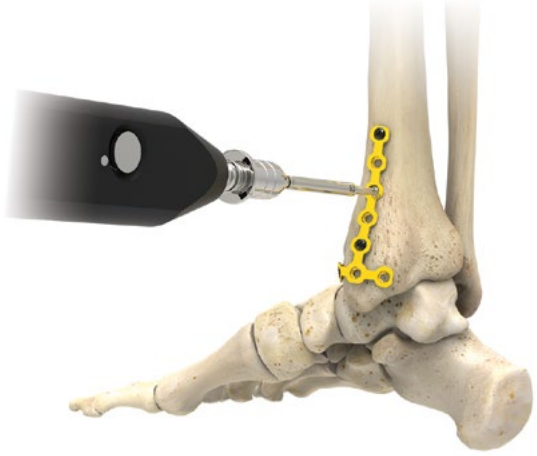
To insert a 3.5 mm variable angle hexalobe screw, assemble the 2.26 N•m Torque Limiting Quick Connect (80-2367) to the Handle for Torque Limiting Quick Connect (80-2368). Connect the T15 Stick Fit Hexalobe Driver (80-0760) to the Torque Limiting Quick Connect assembly.

Advance the screw by hand until achieving an audible click and/or tactile feedback. Final tightening should be completed with the Torque Limiting Handle, which is designed to provide a secure lock between the plate and screw. Upon final seating, confirm proper screw placement and screw length under fluoroscopy.

Note: Do not use a Torque Limiting Quick Connect for screw removal.

Caution: Use the maximum number of screws based on the indication to reduce the risk of screw breakage during healing.

Figure 18



Screw	Torque Limit	Color Band
2.7 mm Variable Angle Hexalobe Screw (3013-27XXX)	1.70 N•m	Brown
3.5 mm Variable Angle Hexalobe Screw (3013-35XXX)	2.26 N•m	Black

Handle for Torque Limiting Quick Connect
(80-2368)

T8 Stick Fit Hexalobe Driver
(80-0759)

T15 Stick Fit Hexalobe Driver
(80-0760)

2.7 mm Variable Angle Hexalobe Screw, 10–60 mm lengths
(3013-27XXX)

3.5 mm Variable Angle Hexalobe Screw, 10–65 mm lengths
(3013-35XXX)

1.70 N•m Torque Limiting Quick Connect
(80-2366)

2.26 N•m Torque Limiting Quick Connect
(80-2367)

Ordering Information [continued]

Screws

1 2.7 mm Variable Angle Hexalobe Screws*

2.7 mm x 10 mm Variable Angle Hexalobe Screw	3013-27010
2.7 mm x 12 mm Variable Angle Hexalobe Screw	3013-27012
2.7 mm x 14 mm Variable Angle Hexalobe Screw	3013-27014
2.7 mm x 16 mm Variable Angle Hexalobe Screw	3013-27016
2.7 mm x 18 mm Variable Angle Hexalobe Screw	3013-27018
2.7 mm x 20 mm Variable Angle Hexalobe Screw	3013-27020
2.7 mm x 22 mm Variable Angle Hexalobe Screw	3013-27022
2.7 mm x 24 mm Variable Angle Hexalobe Screw	3013-27024
2.7 mm x 26 mm Variable Angle Hexalobe Screw	3013-27026
2.7 mm x 28 mm Variable Angle Hexalobe Screw	3013-27028
2.7 mm x 30 mm Variable Angle Hexalobe Screw	3013-27030
2.7 mm x 32 mm Variable Angle Hexalobe Screw	3013-27032
2.7 mm x 34 mm Variable Angle Hexalobe Screw	3013-27034
2.7 mm x 36 mm Variable Angle Hexalobe Screw	3013-27036
2.7 mm x 38 mm Variable Angle Hexalobe Screw	3013-27038
2.7 mm x 40 mm Variable Angle Hexalobe Screw	3013-27040
2.7 mm x 42 mm Variable Angle Hexalobe Screw	3013-27042
2.7 mm x 44 mm Variable Angle Hexalobe Screw	3013-27044
2.7 mm x 46 mm Variable Angle Hexalobe Screw	3013-27046
2.7 mm x 48 mm Variable Angle Hexalobe Screw	3013-27048
2.7 mm x 50 mm Variable Angle Hexalobe Screw	3013-27050
2.7 mm x 55 mm Variable Angle Hexalobe Screw	3013-27055
2.7 mm x 60 mm Variable Angle Hexalobe Screw	3013-27060

2 2.7 mm Locking Hexalobe Screws*

2.7 mm x 8 mm Locking Hexalobe Screw	30-0324
2.7 mm x 10 mm Locking Hexalobe Screw	30-0325
2.7 mm x 12 mm Locking Hexalobe Screw	30-0326
2.7 mm x 14 mm Locking Hexalobe Screw	30-0327
2.7 mm x 16 mm Locking Hexalobe Screw	30-0328
2.7 mm x 18 mm Locking Hexalobe Screw	30-0329
2.7 mm x 20 mm Locking Hexalobe Screw	30-0330
2.7 mm x 22 mm Locking Hexalobe Screw	30-0331
2.7 mm x 24 mm Locking Hexalobe Screw	30-0332
2.7 mm x 26 mm Locking Hexalobe Screw	30-0333
2.7 mm x 28 mm Locking Hexalobe Screw	30-0334
2.7 mm x 30 mm Locking Hexalobe Screw	30-0335
2.7 mm x 32 mm Locking Hexalobe Screw	30-0336
2.7 mm x 34 mm Locking Hexalobe Screw	30-0337
2.7 mm x 36 mm Locking Hexalobe Screw	30-0338
2.7 mm x 38 mm Locking Hexalobe Screw	30-0339
2.7 mm x 40 mm Locking Hexalobe Screw	30-0340
2.7 mm x 42 mm Locking Hexalobe Screw	30-2842
2.7 mm x 44 mm Locking Hexalobe Screw	30-2844
2.7 mm x 46 mm Locking Hexalobe Screw	30-2846
2.7 mm x 48 mm Locking Hexalobe Screw	30-2848
2.7 mm x 50 mm Locking Hexalobe Screw	30-2850
2.7 mm x 55 mm Locking Hexalobe Screw	30-2855
2.7 mm x 60 mm Locking Hexalobe Screw	30-2860

Ordering Information [continued]

Screws

6 3.5 mm Variable Angle Hexalobe Screws*

3.5 mm x 10 mm Variable Angle Hexalobe Screw	3013-35010	3.5 mm x 34 mm Variable Angle Hexalobe Screw	3013-35034
3.5 mm x 12 mm Variable Angle Hexalobe Screw	3013-35012	3.5 mm x 36 mm Variable Angle Hexalobe Screw	3013-35036
3.5 mm x 14 mm Variable Angle Hexalobe Screw	3013-35014	3.5 mm x 38 mm Variable Angle Hexalobe Screw	3013-35038
3.5 mm x 16 mm Variable Angle Hexalobe Screw	3013-35016	3.5 mm x 40 mm Variable Angle Hexalobe Screw	3013-35040
3.5 mm x 18 mm Variable Angle Hexalobe Screw	3013-35018	3.5 mm x 42 mm Variable Angle Hexalobe Screw	3013-35042
3.5 mm x 20 mm Variable Angle Hexalobe Screw	3013-35020	3.5 mm x 44 mm Variable Angle Hexalobe Screw	3013-35044
3.5 mm x 22 mm Variable Angle Hexalobe Screw	3013-35022	3.5 mm x 46 mm Variable Angle Hexalobe Screw	3013-35046
3.5 mm x 24 mm Variable Angle Hexalobe Screw	3013-35024	3.5 mm x 48 mm Variable Angle Hexalobe Screw	3013-35048
3.5 mm x 26 mm Variable Angle Hexalobe Screw	3013-35026	3.5 mm x 50 mm Variable Angle Hexalobe Screw	3013-35050
3.5 mm x 28 mm Variable Angle Hexalobe Screw	3013-35028	3.5 mm x 55 mm Variable Angle Hexalobe Screw	3013-35055
3.5 mm x 30 mm Variable Angle Hexalobe Screw	3013-35030	3.5 mm x 60 mm Variable Angle Hexalobe Screw	3013-35060
3.5 mm x 32 mm Variable Angle Hexalobe Screw	3013-35032	3.5 mm x 65 mm Variable Angle Hexalobe Screw	3013-35065