

KIC

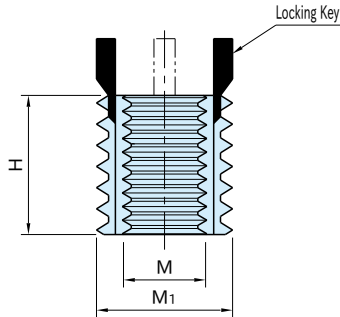
KEYLOCKING INSERTS



(Steel)



(Stainless Steel)



| Type | Body | Locking Key |
|----------------|-----------------------------------|------------------------|
| KIC | SUM23 steel Black oxide finish | SUS302 stainless steel |
| KIC-SUS | SUS303 stainless steel | |

| Style | Steel | Stainless Steel | No. of Keys | M | M ₁ | H | Weight (g) | Installation Tool |
|-------------------|--------------------|----------------------|----------------------|--------------------|-------------------------|-------|------------|-------------------|
| | Part Number | Part Number | | (Internal Threads) | (External Threads) | | | |
| MINIATURE | — | KIC0204-SUS | 2 | M 2 X0.4 | M 4 X0.7 | 3 | 0.13 | KICTLM02 |
| | — | KIC025045-SUS | | M 2.5X0.45 | M 4.5X0.75 | 3.8 | 0.19 | KICTLM025 |
| | — | KIC0305-SUS | | M 3 X0.5 | M 5 X0.8 | 4.3 | 0.32 | KICTLM03 |
| | — | KIC0406-SUS | | M 4 X0.7 | M 6 X0.75 (Fine Thread) | 5.3 | 0.54 | KICTLM04 |
| THIN WALL | KIC0508 | KIC0508-SUS | 2 | M 5 X0.8 | M 8 X1.25 | 8 | 1.5 | TWM 5 |
| | KIC0610 | KIC0610-SUS | | M 6 X1 | M10 X1.25 (Fine Thread) | 10 | 3 | TWM 6 |
| | KIC0812 | KIC0812-SUS | 4 | M 8 X1.25 | M12 X1.25 (Fine Thread) | 12 | 4.5 | TWM 8 |
| | KIC1014 | KIC1014-SUS | | M10 X1.5 | M14 X1.5 (Fine Thread) | 14 | 6.5 | TWM10 |
| | KIC1216 | KIC1216-SUS | | M12 X1.75 | M16 X1.5 (Fine Thread) | 16 | 9 | TWM12 |
| HEAVY DUTY | KIC0408 | KIC0408-SUS | 2 | M 4 X0.7 | M 8 X1.25 | 8 | 1.5 | HDM 4 |
| | KIC0510 | KIC0510-SUS | | M 5 X0.8 | M10 X1.25 (Fine Thread) | 10 | 4 | HDM 5 |
| | KIC0612 | KIC0612-SUS | | M 6 X1 | M12 X1.25 (Fine Thread) | 12 | 6.5 | HDM 6 |
| | KIC0814 | KIC0814-SUS | 4 | M 8 X1.25 | M14 X1.5 (Fine Thread) | 14 | 9.5 | HDM 8 |
| | KIC1016 | KIC1016-SUS | | M10 X1.5 | M16 X1.5 (Fine Thread) | 16 | 13 | HDM10 |
| | KIC1218 | KIC1218-SUS | | M12 X1.75 | M18 X1.5 (Fine Thread) | 18 | 17 | HDM12 |
| | KIC1622 | KIC1622-SUS | | M16 X2 | M22 X1.5 (Fine Thread) | 22 | 27 | HDM16 |
| | KIC2030 | KIC2030-SUS | | M20 X2.5 | M30 X2 (Fine Thread) | 30 | 82 | HDM20 |
| KIC2433 | KIC2433-SUS | M24 X3 | M33 X2 (Fine Thread) | 33 | 96 | HDM24 | | |

Features

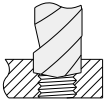
- The driven-down locking keys allow providing positive lock against rotation.
- Threaded insert that allows quickly repair damaged or worn-out threads with stronger threads.
- Perfect for use in holes where bolts are frequently screwed in and out.
- Strengthens threads in any parent material : ferrous, non-ferrous or non-metallic.

Installation & Removal

Installation

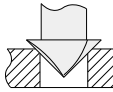
Keylocking Inserts can be installed easily.

①



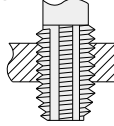
1. Drill out old or damaged threads using a tap drill specified in the chart.

②



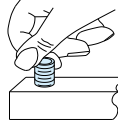
2. Countersink at 90-120°

③



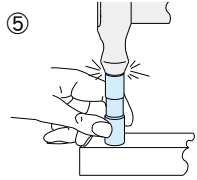
3. Tap new threads with a standard tap drill (see the chart for proper size and depth).

④



4. Screw in an insert 0.5-1mm below the surface.
For Miniature Keylocking Inserts, use **KICTLM** installation tool.

⑤



5. Drive locking keys down with several light hammer taps on a proper installation tool.
For Miniature Keylocking Inserts, use **KICTLM** installation tool.

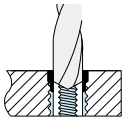
Note

For small size, screw the Keylocking Insert by inserting a bar between the keys. In that cases, ensure that the keys do not receive excess load, which can cause breakage of the keys.

Removal

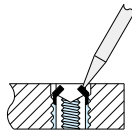
Keylocking Inserts can be removed without damage to the parent material.

①



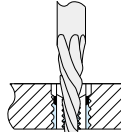
1. Drill out the insert to the size and depth (see the chart for proper size and depth).

②



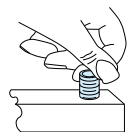
2. Bend the keys down and break them off.

③



3. Remove the insert using a screw extractor or similar tool.

④



4. Screw a replacement insert into the original hole. Recommended Drill & Tap Sizes for Installation and Removal

| Style | Part Number | | Tap Drill Size | Installation | | Removal | |
|------------|----------------|----------------------|----------------|------------------------|------------|---------|-------|
| | Carbon Steel | Stainless Steel | | Thread Tap | | Drill | |
| | | | | Size | Min. Depth | Size | Depth |
| MINIATURE | - | KIC0204-SUS | 3.4 | M 4 ×0.7 | 4 | 2.8 | 2 |
| | | KIC025045-SUS | 3.9 | M 4.5×0.75 | 5 | 3 | |
| | | KIC0305-SUS | 4.4 | M 5 ×0.8 | 5.5 | 3.5 | 2.3 |
| | | KIC0406-SUS | 5.5 | M 6 ×0.75(Fine Thread) | 6.5 | 4.6 | 2.5 |
| THIN WALL | KIC0508 | KIC0508-SUS | 6.9 | M 8 ×1.25 | 9.5 | 5.5 | 4 |
| | KIC0610 | KIC0610-SUS | 8.8 | M10 ×1.25(Fine Thread) | 11.5 | 7.5 | 4.8 |
| | KIC0812 | KIC0812-SUS | 10.8 | M12 ×1.25(Fine Thread) | 13.5 | 9.5 | |
| | KIC1014 | KIC1014-SUS | 12.8 | M14 ×1.5 (Fine Thread) | 15.5 | 11.5 | |
| | KIC1216 | KIC1216-SUS | 14.8 | M16 ×1.5 (Fine Thread) | 17.5 | 13.5 | |
| HEAVY DUTY | KIC0408 | KIC0408-SUS | 6.9 | M 8 ×1.25 | 9.5 | 5.5 | 4 |
| | KIC0510 | KIC0510-SUS | 8.8 | M10 ×1.25(Fine Thread) | 12.5 | 7.5 | 4.8 |
| | KIC0612 | KIC0612-SUS | 10.8 | M12 ×1.25(Fine Thread) | 14.5 | 9.5 | |
| | KIC0814 | KIC0814-SUS | 12.8 | M14 ×1.5 (Fine Thread) | 16.5 | 11.5 | |
| | KIC1016 | KIC1016-SUS | 14.8 | M16 ×1.5 (Fine Thread) | 18.5 | 13.5 | |
| | KIC1218 | KIC1218-SUS | 16.8 | M18 ×1.5 (Fine Thread) | 20.5 | 15.5 | |
| | KIC1622 | KIC1622-SUS | 20.5 | M22 ×1.5 (Fine Thread) | 24.5 | 17.8 | 6.4 |
| | KIC2030 | KIC2030-SUS | 28 | M30 ×2 (Fine Thread) | 34.5 | 25.8 | |
| | KIC2433 | KIC2433-SUS | 31 | M33 ×2 (Fine Thread) | 37.5 | 28.8 | |