

SYNCHRO

Micro-Floating[®]Tapper Series



ESS/ESS-OHC, SSR-OHC **NOW ON SALE**

ESS

Small tap size
(M1 ~)

ESS-OHC

For High-Speed,
High-Pressure

SSR-OHC

Long-size Collets
Applicable

HA-M-OHC

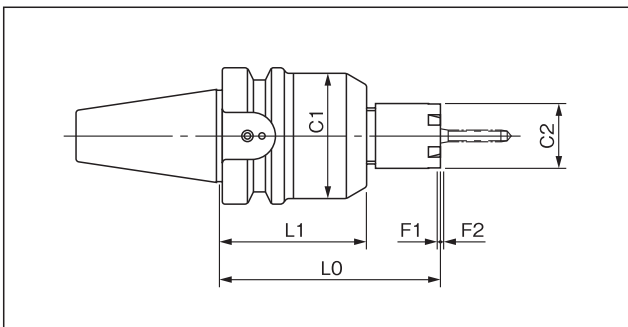
Handy &
Effective

<http://kato-koki.com/eng/>

**for high-speed,
high-pressure!**

Model ESS fits best for M1 - M3 synchronized tapping.
Recommended in the field of mobile phone parts, PC parts, smaller-sized auto parts, semiconductor parts, and medical device parts, etc.

- ◆ **For the best quality of synchronized tapping**
 - ▶ Compatible with high-speed synchro taps & cemented carbide taps
- ◆ **Center-through-coolant**
 - ▶ Up to 7 MPa (ESS-OHC)
- ◆ **Product line-ups**
 - ▶ M1 - M3 (BT30 / BT40) --- ESS 103
 - ▶ M4 - M12 (BT30 / BT40 / BT50) --- ESS412-OHC
 - ▶ M10 - M22 (BT50) --- ESS1022-OHC



▶ Tool positioning is easy with ESS412/1022-OHC because it uses AR-GH/GB collet in which square portion is engraved

| Model | L0 | L1 | C1 | C2 | F1 | F2 | Tapping Capacity | Matching Collet | Spanner | Weight [kg] |
|-------------------|-------|-------|------|------|-----|-----|------------------|-----------------|---------|-------------|
| BT30-ESS 103 | 65.0 | 47.0 | 30.5 | 12.0 | 0.5 | 0.5 | M 1~M 3 | AR 8 | SP-11 | 0.55 |
| BT40-ESS 103 | 75.0 | 57.0 | | | | | | | | 1.18 |
| BT30-ESS 412-OHC | 87.0 | 63.8 | 42.0 | 22.0 | 0.5 | 0.5 | M 4~M12 | *1 AR16-GH | AE-16M | 0.70 |
| BT40-ESS 412-OHC | 102.0 | 78.8 | | | | | | | | 1.45 |
| BT50-ESS 412-OHC | 132.0 | 108.8 | | | | | | | | 4.24 |
| BT40-ESS 1022-OHC | 160.0 | 126.9 | 66.0 | 50.0 | 0.5 | 0.5 | M10~M22 | AR32-GH | FK-7 | 3.45 |
| BT50-ESS 1022-OHC | 160.0 | 126.9 | | | | | | | | 5.59 |

*1 M4 collet for ESS412-OHC would be AR16-GB

SYNCHRO

Micro-Floating®
Tapper

SSR-OHC

CA
Series

**Handiness &
High Performance!**

For synchronized tapping. Quick change of taps.
Longer-size tap collets applicable.
Ideal for bigger-size and / or complex-shape works.

◆ Handiness & high performance

- ▶ Conventional TCA / TCA-L, TCA-SB, TCA-HP-SB Tap Collets are applicable
- ▶ In changing taps, re-adjustment of tool length is unnecessary

◆ Six sizes of tap collets in length

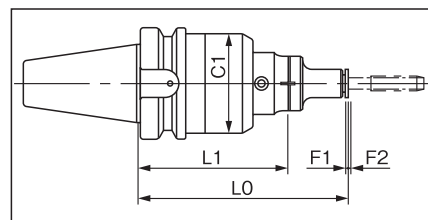
- ▶ Cost optimization by changing from longer-size taps to normal-size taps in wider variety

◆ Center-through-coolant

- ▶ Up to 2 MPa (SSR-OHC + TCA-SB)
- ▶ Up to 5 MPa (SSR-OHC + TCA-HP-SB)

◆ Product line-ups

- ▶ M4 - M12 (BT40 / BT50) --- SSR412-OHC
- ▶ M10 - M22 (BT50) --- SSR1022-OHC



BT40-SSR412- OHC
+
TCA412-S

| Model | L0 | L1 | C1 | F1 | F2 | Tapping Capacity | Matching Collet | Weight [kg] |
|-------------------|-------|-------|------|-----|-----|------------------|------------------------------------|-------------|
| BT30-SSR 412-OHC | 165.0 | 132.0 | 56.0 | 0.5 | 0.5 | M 4~M12 | TCA 412, TCA 412-SB, TCA 412-HP-SB | 1.50 |
| BT40-SSR 412-OHC | 150.0 | 117.0 | 56.0 | 0.5 | 0.5 | M 4~M12 | TCA 412, TCA 412-SB, TCA 412-HP-SB | 1.90 |
| BT50-SSR 412-OHC | 150.0 | 117.0 | 56.0 | 0.5 | 0.5 | M 4~M12 | TCA 412, TCA 412-SB, TCA 412-HP-SB | 4.30 |
| BT50-SSR 1022-OHC | 195.0 | 140.0 | 74.0 | 0.5 | 0.5 | M10~M22 | TCA1022, TCA1022-SB, TCA1022-HP-SB | 4.80 |

SYNCHRO

Micro-Floating®
Tapper

HA-M-OHC

SA
Series

Regular assortment of synchronized tapping. Quick change of taps / tap collets.
Center-through-coolant / mist is applicable. Recommended for
industrial machinery parts, heavy machinery parts, construction car parts, auto parts, etc.

- ◆ **Amazing handiness / user-friendliness**
- ◆ **Center-through-coolant / mist applicable**
- ◆ **Product line-ups : M3 - M56**

* You can find the detailed info on our website.
<http://kato-koki.com/eng/>



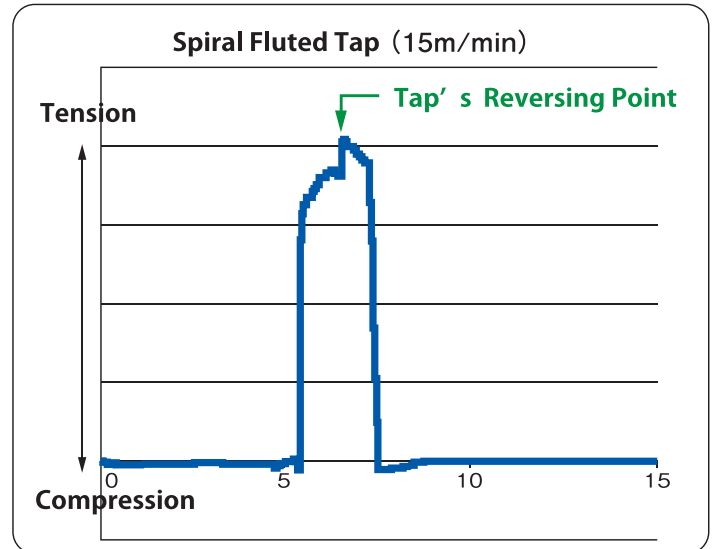
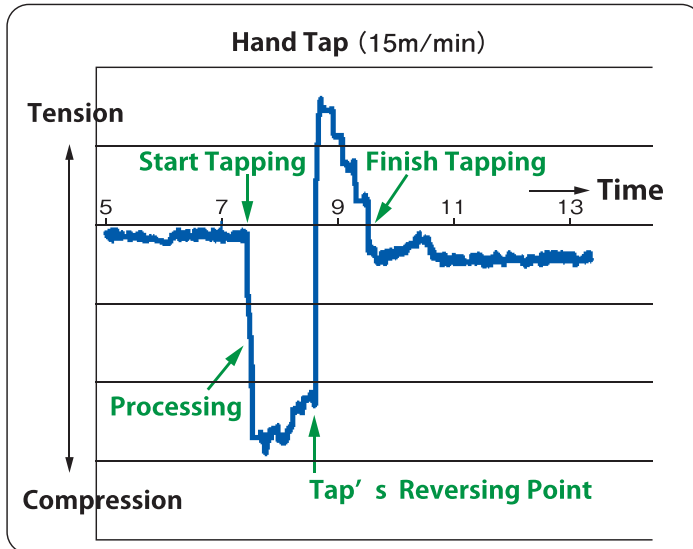
BT40-HA412-M-OHC
+
TC412-MO

What's Micro-Floating Tapper ?

Tapping Holder Series for Synchronized Machining Center

◆ Micro-floating function

In using micro-floating Tappers, you can immediately compensate the synchronization error, preventing from many tapping troubles caused by excessive thrusting power as well as extending the taps' life.



Test Result

by DBT-ESS103



The gap at the thread tip is small.
Thread profile and its surface improved.

M2 Roll Tap, ADC work, 25 m/min.

by a Collet Chuck



Thread is not fully formed and its surface is rough.

by DBT-ESS103



The thread is identical to tap shape and its surface is smooth.

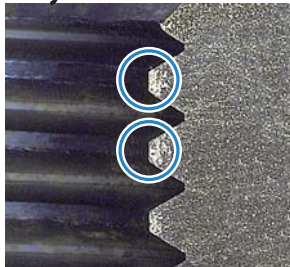
M3 Spiral Fluted Tap, ADC work, 56m/min.

by a Collet Chuck



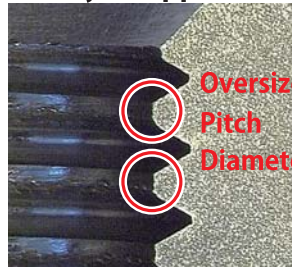
The flat part of thread is wide and its surface is rough.

by BT-HA-M-OHC



M12 Spiral Fluted Tap, SS400 work, 15m/min.

by a Tapper



Separate from these micro-floating tappers, we could also provide a wide range of tap holders that can help you to realize the "Best Synchronized Tapping" ----- model SKB, RF, RA, etc.

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