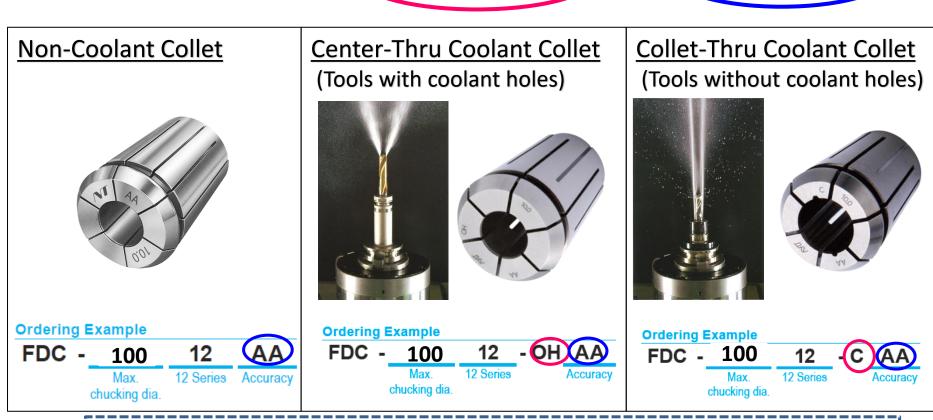
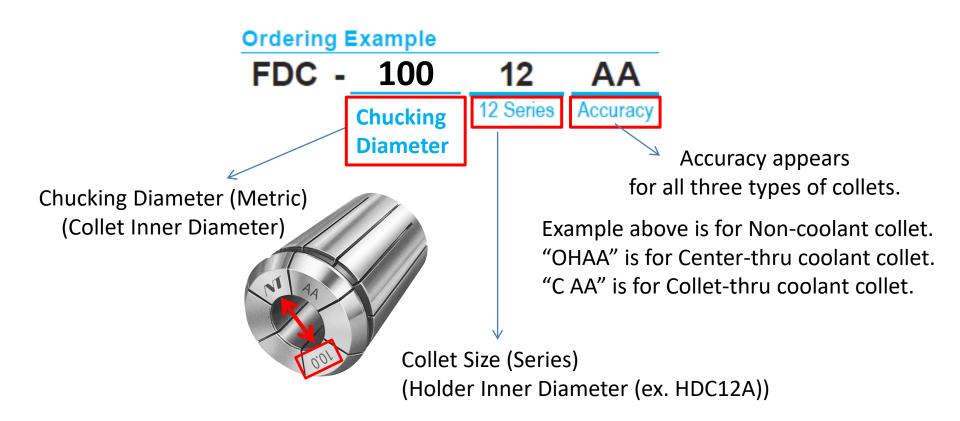
# FDC Ordering Guide

## When ordering FDC Collets, Please include Collet Type and Accuracy.





#### FDC Product Code Breakdown



#### **Incorrect Order Info**



Chucking Diameter should come before Collet Series



#### Step 1: Find a collet series

**Collet Series** 

CAT40-HDC12A-120

FDC – 12 series

| Code          | Model            | d              | L     | L1          | В         | D     | D1    | kg | Preset<br>Screw | Nut           | Collet | Spanner |
|---------------|------------------|----------------|-------|-------------|-----------|-------|-------|----|-----------------|---------------|--------|---------|
| 1990 10407075 | CAT40 -HDC07A -7 | 5 0.020-0.276  | 2.953 | 0.866-1.654 | 0.0-0.157 | 0.906 | 1.750 |    |                 |               |        |         |
| 1990 10407090 | -9               | 0.020-0.276    | 3.543 | 0.866-1.654 | 0.0-0.157 | 0.906 | 1.750 |    | HDS-07          | HDP-07A       | FDC-07 | S-0     |
| 1990 10407105 | -1               | 0.020-0.276    | 4.134 | 0.866-1.654 | 0.0-0.157 | 0.906 | 1.750 |    |                 |               |        |         |
| 1990 10409090 | CAT40 -HDC09A -9 | 0.098-0.354    | 3.543 | 1.063-2.126 | 0.0-0.157 | 1.024 | 1.750 |    |                 |               |        |         |
| 1990 10409105 | -1               | 05 0.098-0.354 | 4.134 | 1.063-2.126 | 0.0-0.157 | 1.024 | 1.750 |    |                 |               |        |         |
| 1990 10409120 | -1               | 20 0.098-0.354 | 4.724 | 1.063-2.126 | 0.0-0.157 | 1.024 | 1.750 |    | HDS-09          | HDP-09        | FDC-09 | S-1L    |
| 1990 10409135 | -1               | 35 0.098-0.354 | 5.315 | 1.063-2.126 | 0.0-0.157 | 1.024 | 1.750 |    |                 |               |        |         |
| 1990 10409165 | -1               | 65 0.098-0.354 | 6.496 | 1.063-2.126 | 0.0-0.157 | 1.024 | 1.750 |    |                 |               |        |         |
| 1990 10412090 | CAT40 -HDC12A -9 | 0.098-0.472    | 3.543 | 1.339-2.598 | 0.0-0.236 | 1.260 | 1.750 |    |                 |               |        |         |
| 1990 10412105 | -1               | 0.098-0.472    | 4.134 | 1.339-2.598 | 0.0-0.236 | 1.260 | 1.750 |    |                 |               |        |         |
| 1990 10412120 | -1               | 20 0.098-0.472 | 4.724 | 1.339-2.598 | 0.0-0.236 | 1.260 | 1.750 |    | LIDE 12         | HDP-12        | FDC-12 | C 21    |
| 1990 10412135 | -1               | 35 0.098-0.472 | 5.315 | 1.339-2.598 | 0.0-0.236 | 1.260 | 1.750 |    | HDS-12          | 1DS-12 HDP-12 | FDC-12 | S-3L    |
| 1990 10412165 | -1               | 65 0.098-0.472 | 6.496 | 1.339-2.598 | 0.0-0.236 | 1.260 | 1.750 |    |                 |               |        |         |
| 200 10        | 1                | 0E - 200 U 120 | 7 677 | 1 000 7 500 | 200306    | 1 260 | 1 750 |    |                 |               |        |         |

#### Step 2: Do you need a coolant?

#### No Coolant

#### Non-Coolant Collet



**Collet Series** 

FDC -12 **AA** 

Please go to Page 6 for next step.

#### With Coolant

Center-Thru Coolant Collet (Tools with coolant holes)









Collet-Thru Coolant Collet

**Collet Series** 

FDC -12 - **OHAA** 

**Collet Series** 

FDC -12 **C AA** 

Please go to Page 8 for next step (Skip Page 6 & 7).

#### **Non-Coolant Collet**

**Collet Series** 

FDC -12 AA

#### Step 3-AA: Choose Collet I.D. for Cutting Tool Shank Dia.

| Tool sha                        | nk dia.                 |           |           | Model     |      |
|---------------------------------|-------------------------|-----------|-----------|-----------|------|
| mm (inch)                       | inch                    | FDC-07    | FDC-09    | FDC-12    | FD   |
| φ 1.0 ~ 0.5                     | $\phi$ 0.039 ~ 0.020    | FDC-01007 | _         | _         |      |
| φ 1.5 ~ 1.0                     | $\phi$ 0.059 ~ 0.039    | FDC-01507 | _         | _         |      |
| φ 2.0 ~ 1.5                     | $\phi 0.079 \sim 0.059$ | FDC-02007 | _         |           |      |
|                                 |                         |           |           |           |      |
| $\varphi = 0.0 \sim 1.3 (3/10)$ | φ 0.515 ~ 0.266         |           | 100 0000  | 0012      | 100  |
| $\phi$ 8.5 ~ 8.0                | φ 0.335 ~ 0.315         | _         | FDC-08509 | FDC-08512 | FDC- |
| $\phi$ 9.0 ~ 8.5                | $\phi$ 0.354 ~ 0.335    | _         | FDC-09009 | FDC-09012 | FDC- |
| φ 9.5 ~ 9.0                     | φ 0.374 ~ 0.354         | _         | _         | FDC-09512 | FDC- |
| φ 10.0 ~ 9.5 (3/8")             | φ 0.394 ~ 0.374         | _         | _         | FDC-10012 | FDC  |

\* If you would like to use Φ**10.0**mm shank,

FDC-**100** 12-AA is a right collet for you.

- \* AA Collets collapse by 0.5mm, so FDC-10012 AA can hold Φ9.5~10.0mm shank.

  If you would like to use Φ9.6mm shank, You can use FDC-10012 AA.
- → Refer next page for a inch size shank.

#### **Non-Coolant Collet**

\* Standard Inch Size is indicated in a tool shank dia. column.

\* If you would like to use Φ3/8" shank, FDC-**100**12 AA is a right collet for you.

|     | To              | ol shan  | k dia                |           |           | Model     |                 |  |
|-----|-----------------|----------|----------------------|-----------|-----------|-----------|-----------------|--|
|     |                 | OI SHAII |                      |           |           |           |                 |  |
| _   | mm (inch)       |          | inch                 | FDC-07    | FDC-09    | FDC-12    | FD              |  |
| φ   | 1.0 ~ 0.5       |          | $\phi$ 0.039 ~ 0.020 | FDC-01007 | _         | _         |                 |  |
| φ   | 1.5 ~ 1.0       |          | $\phi$ 0.059 ~ 0.039 | FDC-01507 | _         | _         |                 |  |
| φ   | 2.0 ~ 1         |          | $\phi$ 0.079 ~ 0.059 | FDC-02007 | _         | _         |                 |  |
| φ   | 2.5 ~ 2.0       |          | $\phi$ 0.098 ~ 0.079 | FDC-02507 | -         | _         |                 |  |
| φ   | 3.0 ~ 2.5       |          | $\phi$ 0.118 ~ 0.098 | FDC-03007 | FDC-03009 | FDC-03012 |                 |  |
| φ   | 3.5 ~ 3.0 (1    | /8")     | $\phi$ 0.138 ~ 0.118 | FDC-03507 | FDC-03509 | FDC-03512 |                 |  |
| φ   | 4.0 ~ 3.5       |          | $\phi$ 0.157 ~ 0.138 | FDC-04007 | FDC-04009 | FDC-04012 | FDC-            |  |
| φ   | 4.5 ~ 4.0       |          | φ 0.177 ~ 0.157      | FDC-04507 | FDC-04509 | FDC-04512 | FDC-            |  |
| φ   | 5.0 ~ 4.5 (3    | /16")    | $\phi$ 0.197 ~ 0.177 | FDC-05007 | FDC-05009 | FDC-05012 | FDC-            |  |
| φ   | 5.5 ~ 5.0       |          | $\phi$ 0.217 ~ 0.197 | FDC-05507 | FDC-05509 | FDC-05512 | FDC-            |  |
| φ   | 6.0 ~ 5.5       |          | φ 0.236 ~ 0.217      | FDC-06007 | FDC-06009 | FDC-06012 | FDC-            |  |
| φ   | 6.5 ~ 6.0 (1/   | /4")     | $\phi$ 0.256 ~ 0.236 | FDC-06507 | FDC-06509 | FDC-06512 | FDC-            |  |
| φ   | 7.0 ~ 6.5       |          | $\phi$ 0.276 ~ 0.256 | FDC-07007 | FDC-07009 | FDC-07012 | FDC-            |  |
| φ   | 7.5 ~ 7.0       |          | φ 0.295 ~ 0.276      | _         | FDC-07509 | FDC-07512 | FDC-            |  |
| φ   | 8.0 ~ 7.5 (5.   | /16")    | φ 0.315 ~ 0.295      | _         | FDC-08009 | FDC-08012 | FDC-            |  |
| φ   | 8.5 ~ 8.0       | 1        | φ 0.335 ~ 0.315      | _         | FDC-08509 | FDC-08512 | FDC-            |  |
| φ   | 9.0 ~ 8.5       |          | φ 0.354 ~ 0.335      | _         | FDC-09009 | FDC-09012 | FDC-            |  |
| φ   | 9.5 ~ 9.0       |          | φ 0.374 ~ 0.354      | _         | _         | FDC-09512 | FDC-            |  |
| φ 1 | 10.0 ~ 9.5 (3   | 3/8")    | φ 0.394 ~ 0.374      | _         | _         | FDC-10012 | ] <del>Ke</del> |  |
| φ 1 | 10.5 ~ 10.0     |          | φ 0.413 ~ 0.394      | _         | _         | FDC-10512 | FDC-            |  |
|     | 11.0 ~ 10.5     |          | φ 0.433 ~ 0.413      | _         | _         | FDC-11012 | FDC             |  |
| •   | 11.5 ~ 11.0 (7. | 7/16")   | φ 0.453 ~ 0.433      | _         | _         | FDC-11512 | FDC             |  |
|     | 12.0 ~ 11.5     | ,        | φ 0.472 ~ 0.453      | _         | _         | FDC-12012 | FDC-            |  |
| -   | 12.5 ~ 12.0     |          | φ 0.492 ~ 0.472      | _         | _         | _         | FDC             |  |
|     | 13.0 ~ 12.5 (1) | /2")     | φ 0.512 ~ 0.492      | _         | _         | _         | FDC-            |  |

#### **Coolant Collet**

**Collet Series** 

$$FDC - 12 - OHAA$$

FDC - 12 - CAA

#### Step 3-OHAA or C AA:

Choose Collet I.D. for Cutting Tool Shank Dia.

| Tool shanl        | cdia.        |                |                | Model           |      |
|-------------------|--------------|----------------|----------------|-----------------|------|
| mm (inch)         | inch         | FDC-07-OHAA    | FDC-09-OHAA    | FDC-12-OHAA     |      |
| φ 3.0             | φ 0.118      | FDC-03007-OHAA | FDC-03009-OHAA | FDC-03012-OHAA  |      |
| $\phi$ 3.2 (1/8") | $\phi$ 0.125 | FDC-03207-OHAA | FDC-03209-OHAA | FDC-03212-OHAA  |      |
| $\phi$ 3.5        | $\phi$ 0.138 | FDC-03507-OHAA | FDC-03509-OHAA | FDC-03512-OHAA  |      |
| φ 4.0             | d 0.157      | FDC-04007-OHAA | FDC-04009-OHAA | FDC-04012-OHAA  |      |
|                   |              |                |                |                 |      |
| Φ 9.0             | Ø 0.554      |                | FDG-00003-GHAA | 1-00-00012-OHAA | FL   |
| φ 9.5             | φ 0.374      | _              | _              | FDC-09512-OHAA  | _ F[ |
| φ 9.6 (3/8")      | φ 0.375      | -              | -              | FDC-09612-OHAA  |      |
| φ 10.0            | φ 0.394      | -              | -              | FDC-10012-OHAA  | F    |
| Φ 10.2            | Φ 0.402      | -              | -              | FDC-10212-OHAA  | F    |
| φ 10.5            | φ 0.413      | -              | -              | FDC-10512-OHAA  | F    |

\* If you would like to use Φ10.0mm shank,

FDC-**100** 12-OHAA(or C AA) is a right collet for you.

\* OHAA(or C AA) Collets collapse by 0.1mm, so FDC-10012-OHAA(or C AA) can hold only Φ9.9~10.0mm shank.

If you would like to use Φ9.6mm shank, You need FDC-09612-OHAA (or C AA).

→ Refer next page for a inch size shank

#### **Coolant Collet**

\* Standard Inch Size is indicated in a tool shank dia. column.

\*If you would like to use Φ3/8" shank, FDC-**096**12- OHAA (or C AA) is a

|                             |              | right collet for you. |                |                |    |  |  |  |
|-----------------------------|--------------|-----------------------|----------------|----------------|----|--|--|--|
| Tool shan                   | k dia.       |                       | Model          |                |    |  |  |  |
| mm (inch)                   | inch         | FDC-07-OHAA           | FDC-09-OHAA    | FDC-12-OHAA    | F  |  |  |  |
| φ 3.0                       | $\phi$ 0.118 | FDC-03007-OHAA        | FDC-03009-OHAA | FDC-03012-OHAA |    |  |  |  |
| φ 3.2 (1/8")                | $\phi$ 0.125 | FDC-03207-OHAA        | FDC-03209-OHAA | FDC-03212-OHAA |    |  |  |  |
| φ 3.5 ` ´                   | $\phi$ 0.138 | FDC-03507-OHAA        | FDC-03509-OHAA | FDC-03512-OHAA |    |  |  |  |
| $\phi$ 4.0                  | $\phi$ 0.157 | FDC-04007-OHAA        | FDC-04009-OHAA | FDC-04012-OHAA |    |  |  |  |
| φ 4.2                       | $\phi$ 0.165 | FDC-04207-OHAA        | FDC-04209-OHAA | FDC-04212-OHAA |    |  |  |  |
| φ 4.5                       | $\phi$ 0.177 | FDC-04507-OHAA        | FDC-04509-OHAA | FDC-04512-OHAA |    |  |  |  |
| φ 4.8 (3/16")               | $\phi$ 0.187 | FDC-04807-OHAA        | FDC-04809-OHAA | FDC-04812-OHAA |    |  |  |  |
| φ 5.0                       | φ 0.197      | FDC-05007-OHAA        | FDC-05009-OHAA | FDC-05012-OHAA |    |  |  |  |
| φ 5.5                       | $\phi$ 0.217 | FDC-05507-OHAA        | FDC-05509-OHAA | FDC-05512-OHAA |    |  |  |  |
| φ 6.0                       | $\phi$ 0.236 | FDC-06007-OHAA        | FDC-06009-OHAA | FDC-06012-OHAA | FD |  |  |  |
| φ 6.4 (1/4")                | $\phi$ 0.250 | FDC-06407-OHAA        | FDC-06409-OHAA | FDC-06412-OHAA | FD |  |  |  |
| φ 6.5                       | $\phi$ 0.256 | FDC-06507-OHAA        | FDC-06509-OHAA | FDC-06512-OHAA | FD |  |  |  |
| φ 6.8                       | $\phi$ 0.268 | FDC-06807-OHAA        | FDC-06809-OHAA | FDC-06812-OHAA | FD |  |  |  |
| φ 7.0                       | $\phi$ 0.276 | FDC-07007-OHAA        | FDC-07009-OHAA | FDC-07012-OHAA | FD |  |  |  |
| φ 7.5                       | $\phi$ 0.295 | -                     | FDC-07509-OHAA | FDC-07512-OHAA | FD |  |  |  |
| φ 8.0 (5/16")               | $\phi$ 0.315 | -                     | FDC-08009-OHAA | FDC-08012-OHAA | FD |  |  |  |
| φ 8.5 ` ΄                   | $\phi$ 0.335 | -                     | FDC-08509-OHAA | FDC-08512-OHAA | FD |  |  |  |
| φ 9.0                       | $\phi 0.354$ | -                     | FDC-09009-OHAA | FDC-09012-OHAA | FD |  |  |  |
| φ 9.5                       | φ 0.374      | -                     | -              | FDC-09512-OHAA | F  |  |  |  |
| φ 9.6 (3/8")                | φ 0.375      | -                     | -              | FDC-09612-OHAA | FD |  |  |  |
| φ 10.0                      | φ 0.394      | -                     | -              | FDC-10012-OHAA | FD |  |  |  |
| φ 10. <u>2</u>              | $\phi$ 0.402 | -                     | -              | FDC-10212-OHAA | FD |  |  |  |
| φ 10.5                      | φ 0.413      | -                     | -              | FDC-10512-OHAA | FD |  |  |  |
| φ 11.0                      | φ 0.433      | -                     | -              | FDC-11012-OHAA | FD |  |  |  |
| \$ 11. <b>2</b> (7/16")     | φ 0.437      | -                     | -              | FDC-11212-OHAA | FD |  |  |  |
| φ 11.5                      | $\phi 0.453$ | -                     | -              | FDC-11512-OHAA | FD |  |  |  |
| φ 12.D                      | φ 0.472      | -                     | -              | FDC-12012-OHAA | FD |  |  |  |
| φ 12.5                      | / 0.500      | -                     | -              | -              | FD |  |  |  |
| φ 12. <mark>7 (1/2")</mark> | $\phi$ 0.500 | -                     | -              | -              | FD |  |  |  |

If you don't see your tool shank dia. in the chart, please contact NT USA.

#### FDC AA COLLETS (collapses by 0.5mm)

| Inch (fraction) | Inch (decimal) | Inch Range    | Metric | Metric Range | Collet      | Series             |
|-----------------|----------------|---------------|--------|--------------|-------------|--------------------|
| 1/16            | 0.063          | 0.079 - 0.059 | 1.588  | 2.0 - 1.5    | FDC - 020** | 07                 |
| 1/8             | 0.125          | 0.138 - 0.118 | 3.175  | 3.5 - 3.0    | FDC - 035** | 07, 09, 12         |
| 3/16            | 0.188          | 0.197 - 0.177 | 4.763  | 5.0 - 4.5    | FDC - 050** | 07, 09, 12, 16, 22 |
| 1/4             | 0.250          | 0.256 - 0.236 | 6.350  | 6.5 - 6.0    | FDC - 065** | 07, 09, 12, 16, 23 |
| 5/16            | 0.313          | 0.315 - 0.295 | 7.938  | 8.0 - 7.5    | FDC - 080** | 09, 12, 16, 22     |
| 3/8             | 0.375          | 0.394 - 0.374 | 9.525  | 10.0 - 9.5   | FDC - 100** | 12, 16, 22         |
| 7/16            | 0.438          | 0.453 - 0.433 | 11.113 | 11.5 - 11.0  | FDC - 115** | 12, 16, 22         |
| 1/2             | 0.500          | 0.512 - 0.492 | 12.700 | 13.0 - 12.5  | FDC - 130** | 16, 22             |
| 5/8             | 0.625          | 0.630 - 0.610 | 15.875 | 16.0 - 15.5  | FDC - 160** | 16, 22             |
| 3/4             | 0.750          | 0.768 - 0.748 | 19.050 | 19.5 - 19.0  | FDC - 195** | 22                 |

#### FDC-OHAA/C AA COLLETS (collapses by 0.1mm)

| La ala /fara ati ara\ | 1 ala / al a al al\ | D.A. a. L | Callat      | Carria             |
|-----------------------|---------------------|-----------|-------------|--------------------|
| inch (fraction)       | Inch (decimal)      | IVIETRIC  | Collet      | Series             |
| 1/8                   | 0.125               | 3.175     | FDC - 032** | 07, 09, 12         |
| 3/16                  | 0.187               | 4.763     | FDC - 048** | 07, 09, 12         |
| 1/4                   | 0.250               | 6.350     | FDC - 064** | 07, 09, 12, 16, 22 |
| 5/16                  | 0.315               | 7.938     | FDC - 080** | 09, 12, 16, 22     |
| 3/8                   | 0.375               | 9.525     | FDC - 096** | 12, 16, 22         |
| 7/16                  | 0.437               | 11.113    | FDC - 112** | 12, 16, 22         |
| 1/2                   | 0.500               | 12.700    | FDC - 127** | 16, 22             |
| 5/8                   | 0.630               | 15.875    | FDC - 160** | 16, 22             |
| 3/4                   | 0.750               | 19.050    | FDC - 191** | 22                 |