

# Rotary Shaft ▶ Grooved with Snap Ring/Internal Thread on Both Ends·Standard type

## Two-end Step Type



Please order according to the diagram

①~⑥ Select the type and parameters in the order of for ordering

■ Grooved with Snap Ring

Model(●Code) — ●D — ●L — ●E.F — ●A.B — ●P.Q — (LC LA)...

NDACH

D6

L300

E15-F15

A5-B5

P5-Q5

LC

■ Optional Processing

Discounted Price  
Quantity 1~9 10~  
Price 100% Separate Quotation  
Price Excluding Tax (¥/kg)

■ Internal Thread on Both Ends

Model(●Code) — ●D — ●L — ●E.F — ●P — ●M — (LC LA)...

NDBAH

D6

L300

E10-F10

P7

M4

LC

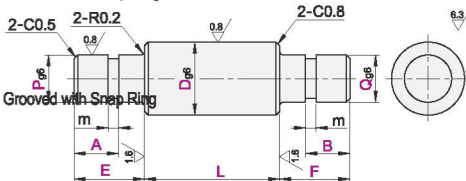
■ Optional Processing



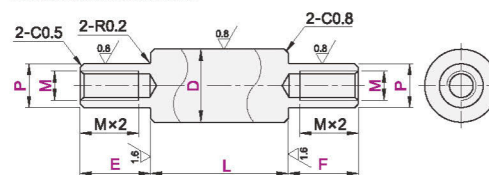
CAD 3D

① For roundness, straightness, perpendicularity, and coaxiality, please refer to the rotary shaft product overview.

Grooved with Snap Ring



Internal Thread on Both Ends



| Code  | Type                   | Tolerance<br>D P | Material<br>International Equivalent | Surface Treatment          | Accessory         |
|-------|------------------------|------------------|--------------------------------------|----------------------------|-------------------|
| NDACH | Grooved with Snap Ring | g6 g6            | 45 S45C                              | Black Oxide Finish         | 2 retaining rings |
| NDACJ |                        |                  |                                      | Electroless Nickel Plating |                   |
| NDBAH |                        | g6 g6            | 45 S45C                              | Black Oxide Finish         |                   |
| NDBAJ |                        |                  |                                      | Electroless Nickel Plating |                   |
| NDBAK |                        |                  | 0Cr18Ni9 SUS304                      | —                          |                   |
| NDBBH |                        | h7 h7            | 45 S45C                              | Black Oxide Finish         |                   |
| NDBBJ |                        |                  |                                      | Electroless Nickel Plating |                   |
| NDBBK |                        |                  | 0Cr18Ni9 SUS304                      | —                          |                   |
| NDBCK |                        | g6               | 45 S45C                              | Black Oxide Finish         |                   |
| NDBCJ |                        |                  |                                      | Electroless Nickel Plating |                   |
| NDBCK |                        | h9               | 0Cr18Ni9 SUS304                      | —                          |                   |
| NDBDH |                        | h7               | 45 S45C                              | Black Oxide Finish         |                   |
| NBDJ  |                        |                  |                                      | Electroless Nickel Plating |                   |
| NBDK  |                        |                  | 0Cr18Ni9 SUS304                      | —                          |                   |

| D-P     | g6     | h7     | h9     |
|---------|--------|--------|--------|
| 3.1~6   | -0.004 | -0.012 | -0.030 |
| 6.1~10  | -0.005 | 0      | 0      |
| 10.1~18 | -0.014 | -0.015 | -0.038 |
| 18.1~30 | -0.017 | -0.018 | -0.043 |
| 30.1~50 | -0.027 | -0.021 | -0.052 |
|         | -0.028 | 0      | 0      |
|         | -0.025 | -0.025 | -0.062 |

■ Grooved with Snap Ring

| Model | Minimum Unit 0.1 | Minimum Unit 1    |
|-------|------------------|-------------------|
| ●Code | ●Dg6             | ●L ●E.F ●A.B ●P.Q |
| 6     | 18~300           | 2 3 4 5           |
| 8     | 18~400           | 3 ≤ P < Q < D     |
| 10    | 18~500           |                   |
| 12    |                  |                   |
| 13    | 20~600           |                   |
| 15    |                  |                   |
| 16    |                  |                   |
| 17    |                  |                   |
| 18    | 25~600           |                   |
| 20    |                  |                   |
| 22    |                  |                   |
| 25    |                  |                   |
| 30    |                  |                   |
| 35    |                  |                   |
| 40    | 35~800           |                   |
| 50    |                  |                   |

■ Internal Thread on Both Ends.g6

| Model | Minimum Unit 0.1 | Minimum Unit 1   |
|-------|------------------|------------------|
| ●Code | ●Dg6             | ●L ●E.F ●P ●M    |
| 6     | 18~300           | 3                |
| 8     | 18~400           | 3 4 5            |
| 10    | 18~500           | 4 5 6            |
| 12    | 20~600           | 5 6 8            |
| 13    |                  | 5 6 8            |
| 15    | 20~700           | 5 6 8 10         |
| 16    |                  | 5 6 8 10         |
| 17    |                  | 5 6 8 10 12      |
| 18    |                  | 5 6 8 10 12      |
| 20    | 25~800           | 5 6 8 10 12      |
| 22    |                  | 5 6 8 10 12 16   |
| 25    |                  | 5 6 8 10 12 16   |
| 30    |                  | 8 10 12 16 20    |
| 35    |                  | 8 10 12 16 20 24 |
| 40    | 35~800           | 12 16 20 24      |
| 50    |                  | 16 20 24 30      |

■ Internal Thread on Both Ends.h7

| Model | Minimum Unit 0.1 | Minimum Unit 1   |
|-------|------------------|------------------|
| ●Code | ●Dh7             | ●L ●E.F ●P ●M    |
| 6     | 18~300           | 3                |
| 8     | 18~400           | 3 4 5            |
| 10    | 18~500           | 4 5 6            |
| 12    | 20~600           | 5 6 8            |
| 13    |                  | 5 6 8            |
| 15    | 20~700           | 5 6 8 10         |
| 16    |                  | 5 6 8 10 12      |
| 17    |                  | 5 6 8 10 12      |
| 18    |                  | 5 6 8 10 12 16   |
| 20    | 25~800           | 8 10 12 16 20    |
| 22    |                  | 8 10 12 16 20 24 |
| 25    |                  | 12 16 20 24 30   |
| 30    |                  | 16 20 24 30      |
| 35    | 35~800           |                  |
| 50    |                  |                  |

■ Internal Thread on Both Ends.h9

| Model | Minimum Unit 0.1 | Minimum Unit 1   |
|-------|------------------|------------------|
| ●Code | ●Dh9             | ●L ●E.F ●P ●M    |
| 6     | 18~300           | 3                |
| 8     | 18~400           | 3 4 5            |
| 10    | 18~500           | 4 5 6            |
| 12    | 20~600           | 5 6 8            |
| 13    |                  | 5 6 8            |
| 15    | 20~700           | 5 6 8 10         |
| 16    |                  | 5 6 8 10 12      |
| 17    |                  | 5 6 8 10 12      |
| 18    |                  | 5 6 8 10 12 16   |
| 20    | 25~800           | 8 10 12 16 20    |
| 22    |                  | 8 10 12 16 20 24 |
| 25    |                  | 12 16 20 24 30   |
| 30    |                  | 16 20 24 30      |
| 35    | 35~800           |                  |
| 50    |                  |                  |

Optional Processing

| Code      | Technical Specification                                                                                                                                                                                                                                                                          |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LC        | Change L size tolerance<br>Selection Method LC<br>□ L < 400 Change to L ± 0.05<br>L ≥ 400 Change to L ± 0.1<br>□ Only applicable to retaining ring type                                                                                                                                          |
| LA() LB() | Add 1 flat surface LA()<br>Selection Method LA10-G3<br>Selection Method LB10-J3-Y10-X3<br>□ Minimum Unit 1<br>□ When specifying G.J.X, it must be 50 or below<br>Add 2 flat surface LB()<br>Selection Method KE10<br>□ Minimum Unit 1<br>□ Only applicable to retaining ring type                |
| KE()      | Addition of wrench slots<br>Selection Method KE10<br>□ Minimum Unit 1<br>□ Only applicable to retaining ring type                                                                                                                                                                                |
| KB() KC() | Add 1 keyway KB()<br>Selection Method KB50-S10<br>Selection Method KC50-C8-K40-T1<br>□ Minimum Unit 1<br>□ When specifying S.T.C, it must be 100 or below<br>□ If three keyways are required, please select both KB and KC.<br>□ For keyway details, see the product brief of the rotating shaft |
| PA() QA() | Add keyway to shaft end (Part P/Q)<br>Selection Method PA10<br>□ Minimum Unit 1<br>□ PA-QA ≥ 50, PA-QA ≥ E, P(Q) ≤ 5 Not Applicable<br>□ For keyway details, see the product brief of the rotating shaft<br>□ Only applicable to retaining ring type                                             |
| KD()      | Addition of slots for cam opening<br>Selection Method KD10<br>□ Minimum Unit 1<br>□ Applicable to the D specifications in the right table.                                                                                                                                                       |
| MA() MB() | Add retaining ring groove (with retaining ring attached)<br>Selection Method MA10-MB10<br>□ Minimum Unit 1<br>□ MA(MB) = 4-L/2<br>□ See the product brief of the rotating shaft for retaining ring groove dimensions.                                                                            |

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