

## Ultra Live Centers RN / RNC



### for general use

NEIDLEIN ultra live centers are designed for employment **in turning, grinding and other production machine tools.**

Owing to the application of bearing and the stable design high axial and radial load can be absorbed accurately. Therefore our live centers are outstanding for any application, especially for tooling with face drivers.

#### Type RN with morse taper



with half carbide tip



with full carbide tip

↑ 0.005



↑ 0.003



#### NEIDLEIN revolving ultra live centers type RN / RNC ensure:

- application of live centers in case of high thrust and loading
- run-out deviation max.  
0.005 mm · type turning  
0.003 mm · type grinding
- enhanced true running accuracy HQ upon request
- maintenance-free, due to gasket system and life-time lubrication of bearings; gasket system comprising variable seal and steel protection cover
- excellent demounting by means of extracting nut and extracting disk, which ensures safe and easy removal of the live center from the tailstock spindle sleeve

**Type RNC with morse taper**

» **extended tooling clearance**  
for better access of machining tools

↗ **0.005** 

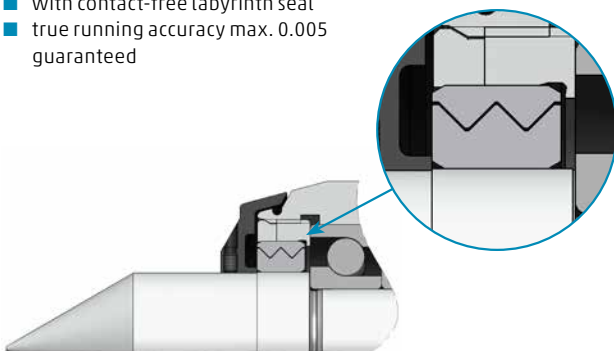
↗ **0.003** 



 with carbide tip

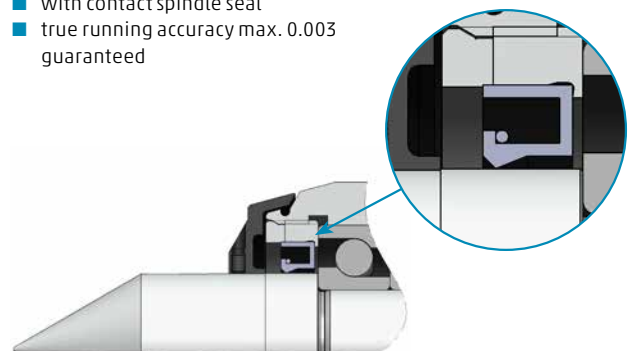
**TYPE TURNING**

- with contact-free labyrinth seal
- true running accuracy max. 0.005 guaranteed



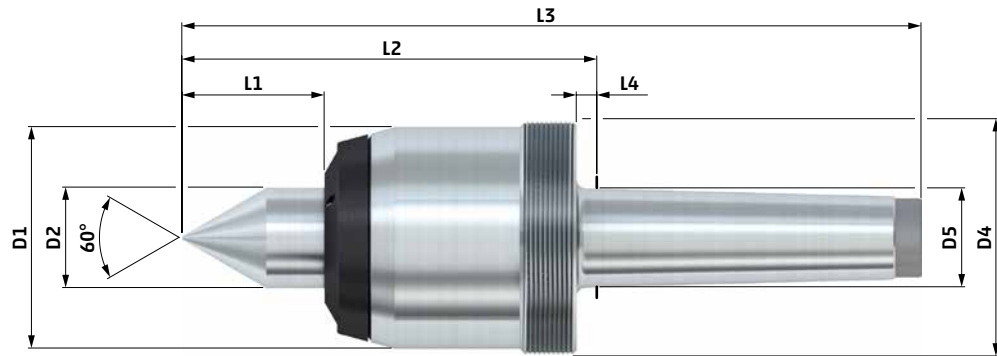
**TYPE GRINDING**

- with contact spindle seal
- true running accuracy max. 0.003 guaranteed



**Technical data – type RN with morse taper**

type tool steel tip

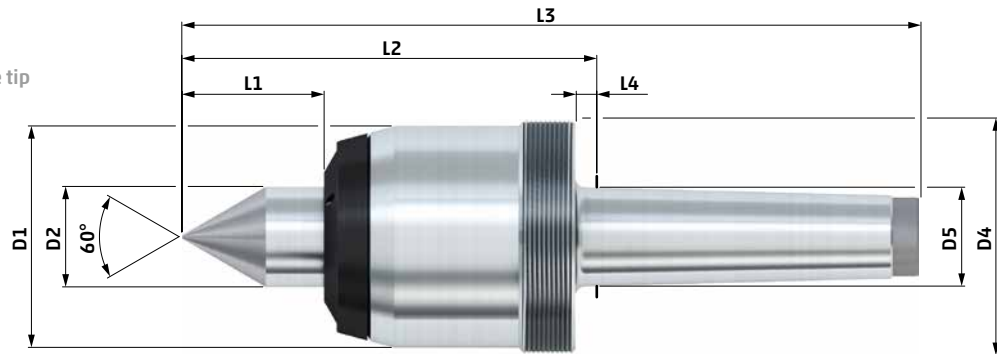
**WITH TOOL STEEL TIP****TYPE  
TURNING****TYPE  
GRINDING**

| type<br>RN | MK | D1  | D2 | D4        | D5    | L1 | L2    | L3    | L4  | rpm max.<br>[1/min] | cat. no.      | cat. no.        |
|------------|----|-----|----|-----------|-------|----|-------|-------|-----|---------------------|---------------|-----------------|
| 3          | 3  | 55  | 22 | M58 x 1.5 | 23.83 | 26 | 102   | 183   | 5   | 8000                | <b>812 01</b> | <b>812 0102</b> |
|            | 4  | 55  | 22 | M58 x 1.5 | 31.27 | 26 | 103.5 | 206   | 6.5 | 8000                | <b>812 02</b> | <b>812 0202</b> |
|            | 5  | 55  | 22 | M58 x 1.5 | 44.4  | 26 | 103.5 | 233   | 6.5 | 8000                | <b>812 03</b> | <b>812 0302</b> |
| 4          | 4  | 70  | 32 | M75 x 1.5 | 31.27 | 45 | 131.2 | 233.7 | 6.5 | 7000                | <b>812 04</b> | <b>812 0402</b> |
|            | 5  | 70  | 32 | M75 x 1.5 | 44.4  | 45 | 131.2 | 260.7 | 6.5 | 7000                | <b>812 05</b> | <b>812 0502</b> |
| 5          | 5  | 92  | 45 | M95 x 2   | 44.4  | 60 | 156.2 | 285.7 | 6.5 | 5000                | <b>812 06</b> | <b>812 0602</b> |
|            | 6  | 92  | 45 | M95 x 2   | 63.35 | 60 | 157.7 | 339.7 | 8   | 5000                | <b>812 07</b> | <b>812 0702</b> |
| 6          | 6  | 107 | 55 | M110 x 2  | 63.35 | 60 | 169.7 | 351.7 | 8   | 3000                | <b>812 08</b> | <b>812 0802</b> |

- Run-out deviation max.: type turning 0.005 mm · type grinding 0.003 mm.
- Extracting nuts and extracting disks see page 118 - 119 for accessories.
- Load chart see page 102.



type full carbide tip

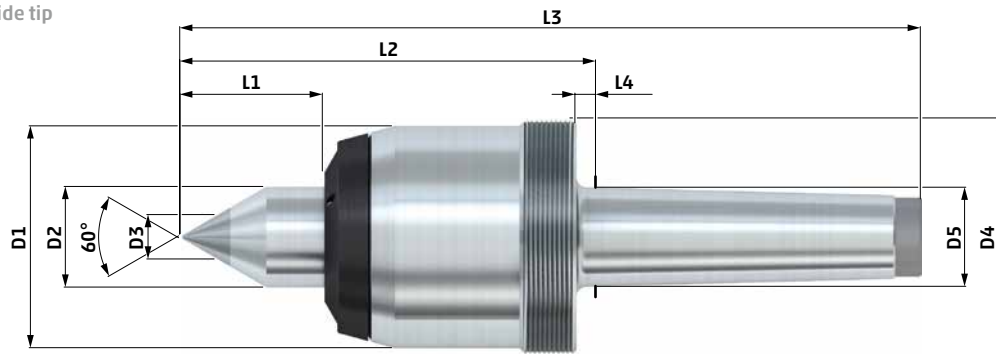
**WITH FULL CARBIDE TIP****TYPE  
TURNING****TYPE  
GRINDING**

| type<br>RN | MK | D1  | D2 | D4        | D5    | L1 | L2    | L3    | L4  | rpm max.<br>[1/min] | cat. no.        | cat. no.        |
|------------|----|-----|----|-----------|-------|----|-------|-------|-----|---------------------|-----------------|-----------------|
| 3          | 3  | 55  | 22 | M58 x 1.5 | 23.83 | 26 | 102   | 183   | 5   | 8000                | <b>812 0104</b> | <b>812 0106</b> |
|            | 4  | 55  | 22 | M58 x 1.5 | 31.27 | 26 | 103.5 | 206   | 6.5 | 8000                | <b>812 0204</b> | <b>812 0206</b> |
|            | 5  | 55  | 22 | M58 x 1.5 | 44.4  | 26 | 103.5 | 233   | 6.5 | 8000                | <b>812 0304</b> | <b>812 0306</b> |
| 4          | 4  | 70  | 32 | M75 x 1.5 | 31.27 | 45 | 131.2 | 233.7 | 6.5 | 7000                | <b>812 0404</b> | <b>812 0406</b> |
|            | 5  | 70  | 32 | M75 x 1.5 | 44.4  | 45 | 131.2 | 260.7 | 6.5 | 7000                | <b>812 0504</b> | <b>812 0506</b> |
| 5          | 5  | 92  | 45 | M95 x 2   | 44.4  | 60 | 156.2 | 285.7 | 6.5 | 5000                | <b>812 0604</b> | <b>812 0606</b> |
|            | 6  | 92  | 45 | M95 x 2   | 63.35 | 60 | 157.7 | 339.7 | 8   | 5000                | <b>812 0704</b> | <b>812 0706</b> |
| 6          | 6  | 107 | 55 | M110 x 2  | 63.35 | 60 | 169.7 | 351.7 | 8   | 3000                | <b>812 0804</b> | <b>812 0806</b> |

- Run-out deviation max.: type turning 0.005 mm · type grinding 0.003 mm.
- Extracting nuts and extracting disks see page 118 - 119 for accessories.
- Load chart see page 102.

**Technical data – type RN with morse taper**

type half carbide tip

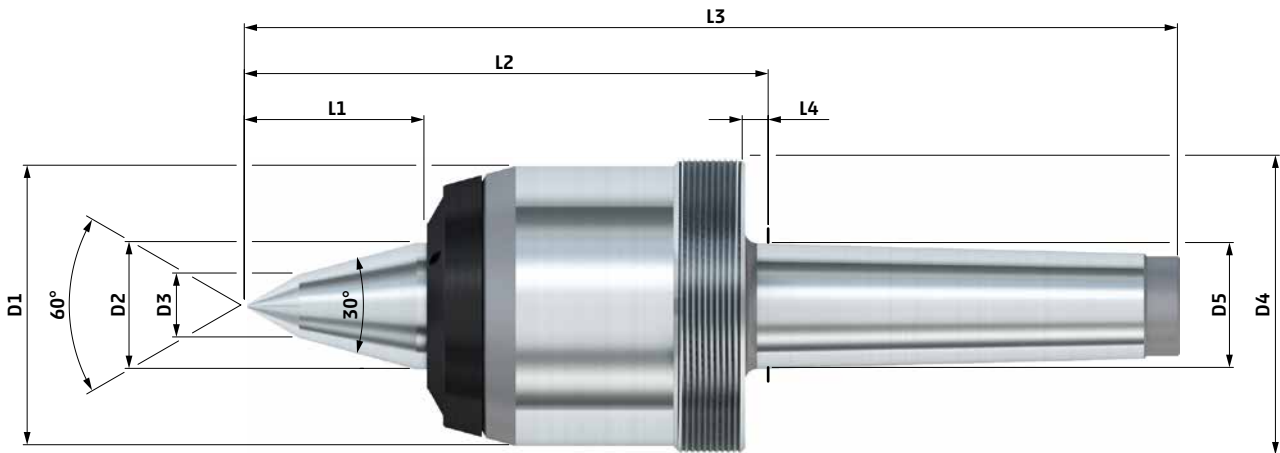
**WITH HALF CARBIDE TIP****TYPE  
TURNING****TYPE  
GRINDING**

| type<br>RN | MK       | D1  | D2 | D3 | D4        | D5    | L1 | L2    | L3    | L4  | rpm max.<br>[1/min] | cat. no.        | cat.no          |
|------------|----------|-----|----|----|-----------|-------|----|-------|-------|-----|---------------------|-----------------|-----------------|
| <b>3</b>   | <b>3</b> | 55  | 22 | 11 | M58 x 1.5 | 23.83 | 26 | 102   | 183   | 5   | 8000                | <b>812 0103</b> | <b>812 0105</b> |
|            | <b>4</b> | 55  | 22 | 11 | M58 x 1.5 | 31.27 | 26 | 103.5 | 206   | 6.5 | 8000                | <b>812 0203</b> | <b>812 0205</b> |
|            | <b>5</b> | 55  | 22 | 11 | M58 x 1.5 | 44.4  | 26 | 103.5 | 233   | 6.5 | 8000                | <b>812 0303</b> | <b>812 0305</b> |
| <b>4</b>   | <b>4</b> | 70  | 32 | 14 | M75 x 1.5 | 31.27 | 45 | 131.2 | 233.7 | 6.5 | 7000                | <b>812 0403</b> | <b>812 0405</b> |
|            | <b>5</b> | 70  | 32 | 14 | M75 x 1.5 | 44.4  | 45 | 131.2 | 260.7 | 6.5 | 7000                | <b>812 0503</b> | <b>812 0505</b> |
| <b>5</b>   | <b>5</b> | 92  | 45 | 22 | M95 x 2   | 44.4  | 60 | 156.2 | 285.7 | 6.5 | 5000                | <b>812 0603</b> | <b>812 0605</b> |
|            | <b>6</b> | 92  | 45 | 22 | M95 x 2   | 63.35 | 60 | 157.7 | 339.7 | 8   | 5000                | <b>812 0703</b> | <b>812 0705</b> |
| <b>6</b>   | <b>6</b> | 107 | 55 | 28 | M110 x 2  | 63.35 | 60 | 169.7 | 351.7 | 8   | 3000                | <b>812 0803</b> | <b>812 0805</b> |

- Run-out deviation max.: type turning 0.005 mm · type grinding 0.003 mm.
- Extracting nuts and extracting disks see page 118 - 119 for accessories.
- Load chart see page 102.

**Technical data – type RNC with morse taper**

type tool steel tip

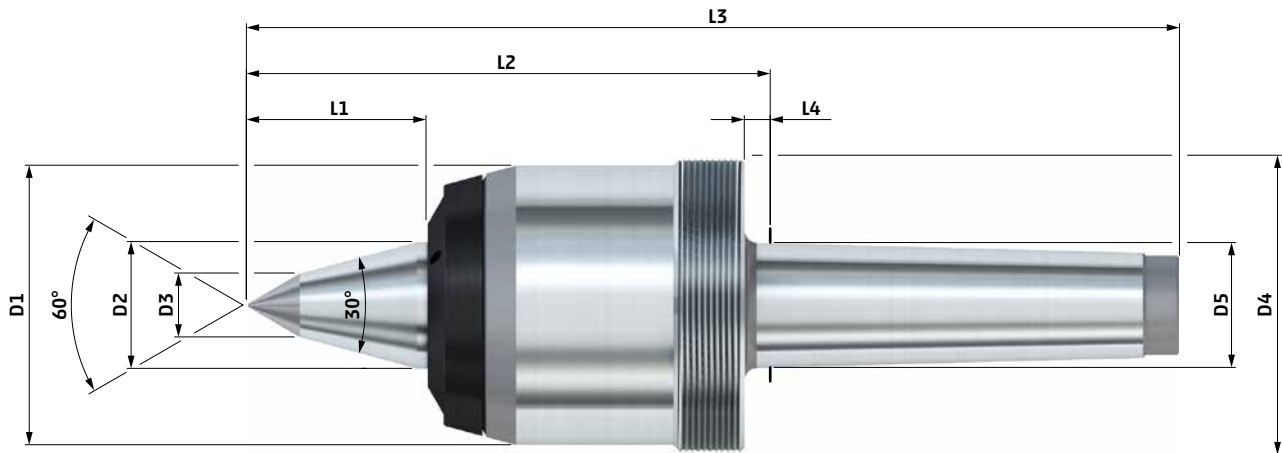
**WITH TOOL STEEL TIP****TYPE  
TURNING****TYPE  
GRINDING**

| type<br>RNC | MK       | D1  | D2 | D3 | D4        | D5    | L1 | L2    | L3    | L4  | rpm max.<br>[1/min] | cat. no.      | cat. no.        |
|-------------|----------|-----|----|----|-----------|-------|----|-------|-------|-----|---------------------|---------------|-----------------|
| <b>3</b>    | <b>3</b> | 55  | 22 | 10 | M58 x 1.5 | 23.83 | 32 | 108   | 189   | 5   | 8000                | <b>813 01</b> | <b>813 0102</b> |
|             | <b>4</b> | 55  | 22 | 10 | M58 x 1.5 | 31.27 | 32 | 109.5 | 212   | 6.5 | 8000                | <b>813 02</b> | <b>813 0202</b> |
|             | <b>5</b> | 55  | 22 | 10 | M58 x 1.5 | 44.4  | 32 | 109.5 | 239   | 6.5 | 8000                | <b>813 03</b> | <b>813 0302</b> |
| <b>4</b>    | <b>4</b> | 70  | 32 | 16 | M75 x 1.5 | 31.27 | 45 | 131.2 | 233.7 | 6.5 | 7000                | <b>813 04</b> | <b>813 0402</b> |
|             | <b>5</b> | 70  | 32 | 16 | M75 x 1.5 | 44.4  | 45 | 131.2 | 260.7 | 6.5 | 7000                | <b>813 05</b> | <b>813 0502</b> |
| <b>5</b>    | <b>5</b> | 92  | 45 | 22 | M95 x 2   | 44.4  | 62 | 158.2 | 287.7 | 6.5 | 5000                | <b>813 06</b> | <b>813 0602</b> |
|             | <b>6</b> | 92  | 45 | 22 | M95 x 2   | 63.35 | 62 | 159.7 | 341.7 | 8   | 5000                | <b>813 07</b> | <b>813 0702</b> |
| <b>6</b>    | <b>6</b> | 107 | 55 | 28 | M110 x 2  | 63.35 | 72 | 181.7 | 363.7 | 8   | 3000                | <b>813 08</b> | <b>813 0802</b> |

- Run-out deviation max.: type turning 0.005 mm · type grinding 0.003 mm.
- Extracting nuts and extracting disks see page 118 - 119 for accessories.
- Load chart see page 102.

**Technical data - type RNC with morse taper**

**HM** type carbide tip



**WITH CARBIDE TIP**

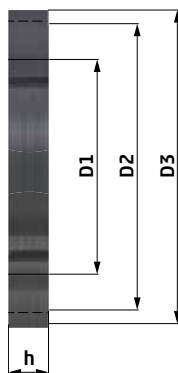
**TYPE TURNING**

**TYPE GRINDING**

| type RNC | MK | D1  | D2 | D3 | D4        | D5    | L1 | L2    | L3    | L4  | rpm max. [1/min] | cat. no. |
|----------|----|-----|----|----|-----------|-------|----|-------|-------|-----|------------------|----------|
| 3        | 3  | 55  | 22 | 10 | M58 x 1.5 | 23.83 | 32 | 108   | 189   | 5   | 8000             | 813 0104 |
|          | 4  | 55  | 22 | 10 | M58 x 1.5 | 31.27 | 32 | 109.5 | 212   | 6.5 | 8000             | 813 0204 |
|          | 5  | 55  | 22 | 10 | M58 x 1.5 | 44.4  | 32 | 109.5 | 239   | 6.5 | 8000             | 813 0304 |
| 4        | 4  | 70  | 32 | 16 | M75 x 1.5 | 31.27 | 45 | 131.2 | 233.7 | 6.5 | 7000             | 813 0404 |
|          | 5  | 70  | 32 | 16 | M75 x 1.5 | 44.4  | 45 | 131.2 | 260.7 | 6.5 | 7000             | 813 0504 |
| 5        | 5  | 92  | 45 | 22 | M95 x 2   | 44.4  | 62 | 158.2 | 287.7 | 6.5 | 5000             | 813 0604 |
|          | 6  | 92  | 45 | 22 | M95 x 2   | 63.35 | 62 | 159.7 | 341.7 | 8   | 5000             | 813 0704 |
| 6        | 6  | 107 | 55 | 28 | M110 x 2  | 63.35 | 72 | 181.7 | 363.7 | 8   | 3000             | 813 0804 |

| cat. no. |
|----------|
| 813 0106 |
| 813 0206 |
| 813 0306 |
| 813 0406 |
| 813 0506 |
| 813 0606 |
| 813 0706 |
| 813 0806 |

- Run-out deviation max.: type turning 0.005 mm · type grinding 0.003 mm.
- Extracting nuts and extracting disks see page 118 - 119 for accessories.
- Load chart see page 102.

**Extracting nut DIN 1804 h****Type DIN 1804 h****Technical data - type DIN 1804 h**

for ultra live centers, center pins and face driver

| D1        | D2 | D3 | h  | cat. no.      |
|-----------|----|----|----|---------------|
| M28 x 1.5 | 43 | 50 | 10 | <b>830 39</b> |
| M32 x 1.5 | 45 | 52 | 11 | <b>830 40</b> |
| M35 x 1.5 | 47 | 55 | 11 | <b>830 41</b> |
| M36 x 1.5 | 48 | 55 | 11 | <b>830 42</b> |
| M48 x 1.5 | 67 | 75 | 13 | <b>830 43</b> |

| D1        | D2  | D3  | h  | cat. no.      |
|-----------|-----|-----|----|---------------|
| M58 x 1.5 | 80  | 90  | 13 | <b>830 22</b> |
| M70 x 1.5 | 90  | 100 | 14 | <b>830 44</b> |
| M75 x 1.5 | 100 | 110 | 14 | <b>830 23</b> |
| M95 x 2   | 120 | 135 | 16 | <b>830 24</b> |
| M110 x 2  | 140 | 155 | 16 | <b>830 25</b> |