

# Roller and Ball inserts, Mechanical

## with spring pack max. load 2.4 kN

#### **Application**

For installation in individual bore holes in press beds without T-slots.

#### Description

When preloaded, the rollers or balls project over the bed level by up to 3 mm. When the die is clamped, the balls are pressed into the bar body against the spring force until they are flush with the bed level.

#### **Advantages**

- Easy and safe die change
- For installation in beds/tables without T-slots
- Versions without and with flange

#### Important note

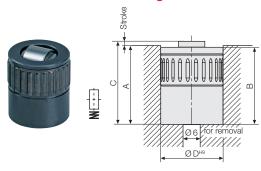
Provide a hole or cut-out for disassembly if a through hole from below is not possible

#### Operating temperature

The permissible load capacity of the roller/ball inserts is reduced depending on the temperature range:

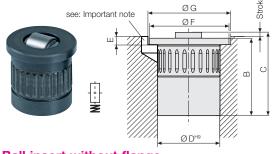
up to 100 °C: 100 % Load >100 - 150 °C: 95 % Load >150 - 200 °C: 70 % Load >200 - 250 °C: 60 % Load

#### Roller insert without flange



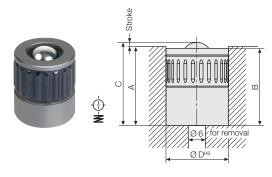
| Load                 | [N]  | 600       | 900       | 1400      | 2400      |
|----------------------|------|-----------|-----------|-----------|-----------|
| Stroke*              | [mm] | 1.5       | 2.0       | 2.0       | 2.0       |
| Α                    | [mm] | 30.0 +0.1 | 32.0 +0.1 | 43.5 +0.1 | 52.5 +0.1 |
| В                    | [mm] | 29.9      | 31.9      | 43.4      | 52.4      |
| C                    | [mm] | 31.5      | 34.0      | 45.5      | 54.5      |
| ØD                   | [mm] | 20        | 24        | 30        | 40        |
| Version up to 100 °C |      | 812100605 | 812100611 | 812100618 | 812100622 |
| Version up to 250 °C |      | on demand | 812108020 | on demand | on demand |

### Roller insert with flange



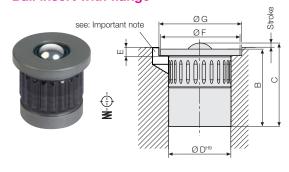
| Load                 | [N]  | 600       | 900       | 1400      | 2400      |
|----------------------|------|-----------|-----------|-----------|-----------|
| Stroke*              | [mm] | 1.5       | 2.0       | 2.0       | 2.0       |
| В                    | [mm] | 29.9 +0.1 | 31.9 +0.1 | 43.4 +0.1 | 52.4 +0.1 |
| С                    | [mm] | 31.5      | 34.0      | 45.5      | 54.5      |
| ØD                   | [mm] | 20        | 24        | 30        | 40        |
| E                    | [mm] | 3.5 +0.1  | 3.5 +0.1  | 4.5 +0.1  | 5.5 +0.1  |
| ØF                   | [mm] | 24.5      | 29.5      | 34.5      | 47.5      |
| ØG                   | [mm] | 25 +0.2   | 30 +0.2   | 35 +0.2   | 48 +0.2   |
| Version up to 100 °C |      | 812100606 | 812100612 | 812100619 | 812100623 |
| Version up to 250 °C |      | on demand | 812108005 | on demand | on demand |

#### Ball insert without flange



| Load                 | [N]  | 200       | 400       | 600       | 1000      |
|----------------------|------|-----------|-----------|-----------|-----------|
| Stroke*              | [mm] | 1.5       | 1.5       | 2.0       | 3.0       |
| Α                    | [mm] | 24.0 +0.1 | 28.5 +0.1 | 34.0 +0.1 | 45.0 +0.1 |
| В                    | [mm] | 23.6      | 28.5      | 34.0      | 44.8      |
| C                    | [mm] | 25.5      | 30.0      | 36.0      | 48.0      |
| ØD                   | [mm] | 20        | 24        | 30        | 40        |
| Version up to 100°C  |      | 812100005 | 812100011 | 812100018 | 812100022 |
| Version up to 250 °C |      | on demand | 812108022 | 812108038 | 812108034 |

#### **Ball insert with flange**



| Load                 | [N]  | 200       | 400       | 600       | 1000      |
|----------------------|------|-----------|-----------|-----------|-----------|
| Stroke*              | [mm] | 1.5       | 1.5       | 2.0       | 2.0       |
| В                    | [mm] | 23.5      | 28.5      | 34.0      | 44.0      |
| С                    | [mm] | 25.2      | 30.2      | 36.0      | 46.0      |
| ØD                   | [mm] | 20        | 24        | 30        | 40        |
| E                    | [mm] | 3.5 +0.1  | 4.0 +0.1  | 4.5 +0.1  | 5.6 +0.1  |
| ØF                   | [mm] | 24.5      | 29.5      | 34.5      | 47.5      |
| ØG                   | [mm] | 25 +0.2   | 30 +0.2   | 35 +0.2   | 48 +0.2   |
| Version up to 100°C  |      | 812100006 | 812100012 | 812100019 | 812100023 |
| Version up to 250 °C |      | on demand | 812108030 | 812108031 | 812108013 |

<sup>\*</sup> Special stroke on request