Garant

# Copy mill 0° negative, with bore, ∅ D / number of teeth Z: 52/4mm

## Order data

| | |
|---|---|
| Order number | 212165 52/4 |
| GTIN | 4045197193926 |
| Item class | 21O |

## Description

**Version:**
Milling body with irregular pitch for smooth cutting.
· **High axial run-out accuracy and concentricity**
· **Stepless repositioning as the cutting edge wears.**
**Application:**
With pack of insert screws No. 219800 - for securing indexable inserts and retaining washers.
**Attention:**
Retaining screws and retaining washers should **not** be used for inserts with positive geometry.
**Note:**
Use GARANT torque screwdriver TQ No. **211750 size 5.7** with bit No. **674252 size 20IP**.
$a_{p\,max}$ = 3.5 mm.

## Technical description

| | |
|---|---|
| suitable indexable insert | RD..1604 |
| Set of retaining washers | 219955 |
| Pack of insert screws | 219800 (20IP; 5.7 Nm) |
| Overall length $L_{tot}$ | 50 mm |

| | |
|---|---|
| ∅ $D_3$ | 36 mm |
| Cutting edge ∅ $D_C$ | 52 mm |
| Mounting bore ∅ | 22 mm |
| Number of cutting edges Z | 4 |
| Through-coolant | yes |
| Circular interpolation milling ∅ $D_{min}$ | 88 mm |
| Circular interpolation milling ∅ $D_{max}$ | 102 mm |
| Circular interpolation milling $a_p$ | 3.5 mm |
| Ramping length L for $\alpha_{max}$ | 31.92 mm |
| Ramping angle $\alpha_{max}$ | 2.01 degrees |
| Setting angle κ | 15 – 30 degrees |
| Fz Helix | 0.7 |
| Shank type | with bore |
| Milling head suitable for insert shape | round |
| Milling application | Circular milling |
| Milling application | Ramping |
| Spacing of the cutters | unequal spacing |
| Tool exchange | PowerCard |
| Type of product | Copy mill |

## Accessories

| | |
|---|---|
| Set of insert screws10 pieces | 219800 |
| PrecisionBit for Torx Plus®, 1/4 inch E 6.3 Torx Plus® profile 20IP | 674252 20IP |
| Torque screwdriver, fixed setting set torque 5,7 N·m | 211750 5,7 |
| Set of retaining washers10 pieces | 219955 |