

Z-Diamond (Zirconia)

Product description

Table structure *Shank types and Diamond grit sizes*

Table 1 Shank types

Shank types	Diameter	Illustration	ISO NO.
FG Standard	Ø 1.60 mm		314
HP Standard	Ø 2.35 mm		104

Table 2 Diamond grit sizes

Designation	Color code	Grit size range	ISO NO.
Coarse (C)	● green & green ring	107 ~ 151 µm	534
Medium (M)	● blue & blue ring	91 ~ 126 µm	524
Fine (F)	● red & red ring	40 ~ 60 µm	514

Application

Cavity preparation	Root canal preparation	Root planing	Crown and bridge technique
Crown preparation	Oral surgery	Removal of old fillings	Crown removal
Working on fillings	Model casting technique	Implantology	Spray-cooling

Safety recommendations

1. Be sure that the bur is inserted fully and tightly into the handpiece.
2. Select suitable speed according to recommended speed table. (Table 3)
3. Never exceed the maximum permissible speed. Exceeding the maximum speed will result in the increased risk of injury in personnel and device.
4. Excessive contact pressure has to be avoided because excessive contact pressure may lead to the increased risk of personnel's injury and the damage of device.
5. Applicable materials and precautions for diamond bur:
 - 5.1 Z-Diamond (Zirconia): including all types of diamond grits.
 - 5.2 General material: When using the following diamond grits, especially Coarse and Super Coarse grit, the user should pay attention to the following points before using:
 - Provide adequate cooling and minimum pressure. (If necessary, use spray cooling (minimum 50 ml/min)).
 - In order to achieve the best performance of Coarse grit or Super Coarse grit, it may be necessary to subsequently use Fine grit or Extra Fine grit.
6. Improper use leads to increased risk and inferior results. Please make sure the application and all instructions for use.
7. Discard any damaged bur or worn working parts immediately because the damaged or worn bur will lead to the user applying higher contact pressure which results in the increased operating temperature. This may lead to the increased risk and injury.
8. The device is to be sterilized prior to be used; without the sterilization could cause bio-contamination and/or cross-infection that could harm the patient seriously.
9. The sterilization parameters are :

Cycle type	Exposure Temperature	At least exposure Time
dynamic air removal	134°C	4 minutes

10. The device is intended to be re-use up to times; over-time use could degrade the intended performance.

Table 3 Recommended Speed Ranges

(The actual maximum speed depends on the dimension and shape of diamond bur. Do not exceed the maximum speed to avoid increasing the risk of injury.)

Z-Diamond (Zirconia)		
Shank	Head diameter in (Ø 1/10 mm)	Recommended Maximum (RPM)
FG	012 - 018	200,000
HP	012 - 024	40,000

Ordering options

1. **Dx Order NO. :** prefer to use Dentex number system, in order to prepare orders efficiently by computer.
Ex : CZ246F (*C : Diamond grit & designation \ *Z246F : Dx No.- Z-Diamond (Zirconia))
2. **Reference NO. :** refer to the common use codes of European brands.
Ex : CZ849/016 (*C : Diamond grit & designation \ *Z849 : Reference No \ *016 : size Ø 1/10 mm)
3. **ISO NO. :** accord to ISO 6360 Number Coding System and apply to the abbreviated form. (Fig.1.)

- ① : **Material of the working part**
•Diamond, Plated metallic binding Ex : 806
- ②, ③ : **Shank and overall length**
•Shank : FG Ex : 31
•Overall length : Standard (19 mm) Ex : 4
•Coupling dimensions according to ISO 1797 (Table 1)
- ④ : **Shape and specific characteristics for groups of instruments**
•Shape : Conical, domed end (ISO 6360-2) Ex : 196
•Specific characteristics for groups of instruments Ex : 534
•Diamond grit design according to ISO 7711-3 (Table 2)
- ⑤ : **Nominal size ISO 2157**
•Largest diameter of the working part (Ø 1/10mm) Ex : 016=1.6 mm

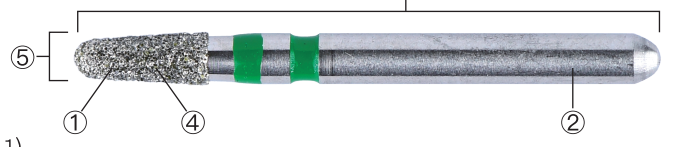


Fig.1. Numbering System ISO 6360
806 314 196 534 016
① ②③ ④ ⑤

★ For further detailed information, please refer to IFU.

FG Diamonds

Round	Round end cylinder	Cylindrical torpedo	Round end taper
 Diamond Grit Size ●M ●C ●F Dx Order No. Z104L Z106L size Ø 1/10 mm 014 018 L mm - - Ref. No. Z801L Z801L ISO No. 697 697	 Diamond Grit Size ●M ●C ●F Dx Order No. Z351 Z350I size Ø 1/10 mm 014 016 L mm 8.0 8.0 Ref. No. Z881 Z881 ISO No. 141 141	 Diamond Grit Size ●M ●C ●F Dx Order No. Z318 size Ø 1/10 mm 014 L mm 10.0 Ref. No. Z879 ISO No. 290	 Diamond Grit Size ●M ●C ●F Dx Order No. Z246F Z322 Z325 size Ø 1/10 mm 016 016 016 L mm 4.0 8.0 10.0 Ref. No. Z849 Z856 Z850 ISO No. 196 198 199

Flame	Egg
 Diamond Grit Size ●M ●C ●F Dx Order No. Z343 Z344B size Ø 1/10 mm 016 014 L mm 8.0 10.0 Ref. No. Z862 Z863 ISO No. 249 250	 Diamond Grit Size ●M ●C ●F Dx Order No. Z255 Z255GL Z255L size Ø 1/10 mm 014 012 014 L mm 2.8 3.0 2.9 Ref. No. Z379 Z379L Z379L ISO No. 277 277 277

HP Diamonds

Round	Round end cylinder	Pointed cone	Flame
 Diamond Grit Size ●M ●C ●F Dx Order No. ZH360 size Ø 1/10 mm 021 L mm - Ref. No. ZH801 ISO No. 001	 Diamond Grit Size ●M ●C ●F Dx Order No. ZH350I size Ø 1/10 mm 016 L mm 8.0 Ref. No. ZH881 ISO No. 141	 Diamond Grit Size ●M ●C ●F Dx Order No. ZH338 size Ø 1/10 mm 018 L mm 10.0 Ref. No. ZH859 ISO No. 166	 Diamond Grit Size ●M ●C ●F Dx Order No. ZH288L ZH344A ZH446 size Ø 1/10 mm 014 012 024 L mm 6.0 10.0 10.0 Ref. No. ZH861 ZH863 ZH863 ISO No. 248 250 250

Round end taper	Egg
 Diamond Grit Size ●M ●C ●F Dx Order No. ZH322 ZH323 ZH326 ZH406L size Ø 1/10 mm 016 018 018 023 L mm 8.0 8.0 10.0 10.0 Ref. No. ZH856 ZH856 ZH850 ZH850 ISO No. 198 198 199 199	 Diamond Grit Size ●M ●C ●F Dx Order No. ZH255 ZH416 size Ø 1/10 mm 014 023 L mm 3.0 4.2 Ref. No. ZH379 ZH379 ISO No. 277 277



manufactured by

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