BRAVIA® & BRAVIA®L

Ball-bearing turbines
Turbine a cuscinetti a sfere
Turbine mit Kugellagern
Turbines à roulements à billes
Turbinas de cojinetes de bolas
Turbinas de rolamentos de bolas
Turbiny na łożyskach kulkowych

REF 162.02
REF 162.52

CE 0051

Operating instructions
Istruzioni per l'uso
Gebrauchsanleitung
Mode d'emploi
Modo de empleo
Instruções de uso
Instrukcja Obsługi

TKD
TeKne Dental

Fig. 1



Fig. 2



Fig. 3

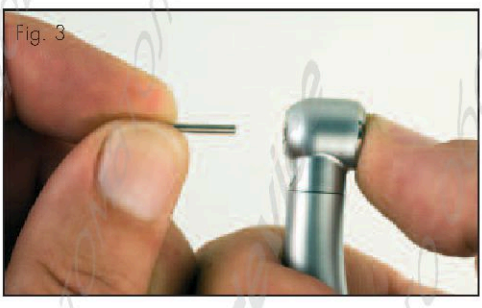


Fig. 4

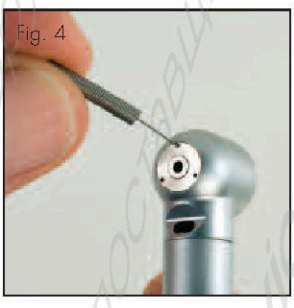


Fig. 5



Fig. 6



ACCESSORIES AND SPARE PARTS / ACCESSORI E RICAMBI / ZUBEHÖR UND ERSATZTEILE / ACCESSOIRES ET RECHANGES / ACCESORIOS Y RECAMBIOS / ACESSÓRIOS E PEÇAS SOBRESSELENTES / AKCESORIA I CZĘŚCI ZAMIENNE	
REF 112.90	LubriONCE® grease artridges / Cartuccie di grasso / Schmiernippel / Graisseur / Engrasador / Engraxador / Wkłady ze smarem
REF 162.90	Rotor / Rotore / Rotor / Rotor / Rotor / Rotor / Rotor
REF 120.00	SO2000 Service Oil / Lubrificante / Schmiernippel / Lubrifiant / Lubricante / Lubrificante / Olej do lubrykacyi
REF 120.02	Nozzle for rapid connection / Beccuccio per attacco rapido / Kanüle für Schnellkupplung / Buse pour connexion rapide / Boquilla para conexión rápida / Bocal para conexão rápida / Dysza do szybkiego połączenia
REF 129.40	Air pressure gauge for 4-hole connection / Manometro per attacco 4 vie / Manometer für 4-Wege-Anschluss / Manomètre pour raccordement 4 voies / Manómetro para enlace 4 orifícios / Manómetro de 4 vias / Manometr do 4-otworowych połączeń
REF 316.30	GYROFLEX® rapid coupling for 3-hole connection / Raccordo rapido per connessione 3 vie / Schnellkupplung für 3-Wege-Anschluss / Raccord rapid pour raccordement 3 voies / Enlace rápido para conexión 3 orifícios / Acoplamento rápido para conexão 3 vias / Szybkozłącze do 3-otworowych połączeń
REF 316.40	GYROFLEX® rapid coupling for 4-hole connection / Raccordo rapido per connessione 4 vie / Schnellkupplung für 4-Wege-Anschluss / Raccord rapid pour raccordement 4 voies / Enlace rápido para conexión 4 orifícios / Acoplamento rápido para conexão 4 vias / Szybkozłącze do 4-otworowych połączeń
REF 316.60	GYROFLEX®L rapid coupling with bulb / Raccordo rapido con lampadina / Schnellkupplung mit Birne / Raccord rapid avec ampoule / Enlace rápido con bombilla / Acoplamento rápido com lâmpada / Szybkozłącze z żarówką
REF 316.62	GYROFLEX®LED rapid coupling with LED / Raccordo rapido con LED / Schnellkupplung mit LED / Raccord rapid avec LED / Enlace rápido con LED / Acoplamento rápido com LED / Szybkozłącze z LED
REF 316.62.09	GYROFLEX®LED rapid coupling with spray regulation / Raccordo rapido con regolazione spray / Schnellkupplung mit spray regulierung / Raccord rapide avec réglage spray / Enlace rápido con regulador spray / Acoplamento rápido com regulamento spray / Szybkozłącze z regulacją spreju

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asistencia tecnica autorizado, o directamente a TKD.

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https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

ENGLISH

DESCRIPTION

High-torque ceramic ball-bearing turbine for professional dental use, compliant to ISO 7785-1 standard.
Weight without coupling: 43 g.
Maximum speed of rotation: 348000 rpm.
Output illumination: 25000 lux.
Maximum noise level: 60 dBA (@3 bar).
Instrument classification: Type 2 accoiding to ISO 7785-1.

This medical device meets the requirements of the European Directives 93/42/EEC (Class IIa) and 2007/47/EC.

CONTENTS

BRAVIA® or BRAVIA®L turbine, a LubriONCE® grease lubricator, a wire cleaner.

CONNECTION

The BRAVIA® turbine must be used together with the GYROFLEX® rapid coupling (REF 316.30 or REF 316.40).
The BRAVIA®L turbine must be used together with the GYROFLEX®L (REF 316.60) or GYROFLEX®LED (REF 316.62 or REF 316.62.09) rapid couplings (Fig. 1).
These turbines can also be used toghether with the MULTIflex® rapid couplings.

AIR PRESSURE

Recommended air pressure: 2.8 ± 0.2 bar (40.5 ± 3.0 psi).
Air consumption: 39 Nl/min (@3 bar).
Check air pressure by means of a gauge (REF 129.40) connected between the turbine and the supply hose (Fig. 2).
Supplied air must be perfectly dry and well-filtered, kept at constant pressure.

SPRAY

Three-jet type.
Spray air pressure: 1.0 ÷ 4.0 bar (14.5 ÷ 58.0 psi).
Water pressure: 0,8 ÷ 2,5 bar (11.6 ÷ 36.3 psi). Water must be well-filtered.
The use of unfiltered hard water will lead to early blockage of the tubings and spray diffusers.
To clean the spray ducts, use the wire cleaner supplied, as shown on Fig. 4.

LIGHTING

The BRAVIA®L turbine is equipped with a highly-efficient light conductor. The light source is located in the GYROFLEX®L or GYROFLEX®LED coupling.

⚠ The turbine must be connected to the power supply unit meeting the requirements of CEI EN 60601-1 standard.

BUR TYPE

Shank diameter: Ø1.60 mm, Type 3 according to ISO 1797-1.
Maximum length: 25 mm, code 4 or 5 or 6 (6th digit) according to ISO 6360-1.
Minimum fitting lenght of shank: 11 mm.

BUR CHANGING

The turbines are equipped with a sophisticated push-button chuck: press the button with the thumb and subsequently insert or extract the bur (Fig. 3).

⚠ **When fitting on a bur make sure it is fully inserted.**
Before inserting a bur, make sure the bur shank is clean.
The turbine must not be started without a bur inserted into the chuck.

The bur gets automatically gripped as soon as the turbine is running.

⚠ To avoid overheating of the push-button, which could cause burns, the button should not be pressed while the turbine is running. Internal tissues (tongue, cheeks, etc..) must then be protected by a retractor or a dental mirror.

LUBRICATION BY GREASE

The turbine must be lubricated with the supplied LubriONCE® grease lubricator daily.
At the very beginning, remove the cap and turn the rear housing clockwise until you can see grease coming out from the rod.

To lubricate turbine, carry out the following operations:
1) Push the button and insert the terminal rod of the grease lubricator into the turbine in place of the bur.
2) Holding turbine and grease lubricator, turn lubricator rear housing 180° clockwise (Fig. 5). During the operation, hold the lubricator perfectly longitudinal to the turbine head, so as to prevent the terminal rod of the lubricator from bending.
3) Remove the grease lubricator, insert the bur and run the turbine for a few seconds before operating.

The injected quantity of grease will be sufficient for one day's work, even if the turbine is repeatedly sterilized in autoclave.

Lubrication is basic to life of the handpiece: repeat it **ONCE A DAY** so that the instrument you have purchased can meet your requirements for long time.

LUBRICATION BY OIL

As an option to grease, it is possible to lubricate instrument by means of the SO2000 service oil (REF 120.00) carrying out the following operations:
1) Disconnect turbine from the rapid coupling;
2) Insert and screw the special nozzle (REF 120.02) onto the lubricant can;
3) Holding turbine by means of a cloth, fully insert the nozzle into the turbine (Fig. 6). Lubricate by pushing once only for one second.

In order for the instrument you have purchased to be helpful in your profession for a very long time, carefully repeat the described operations **before every sterilization cycle and, anyway, at least TWICE A DAY.**

PRELIMINARY PREPARATION

Maintenance processes are described according to ISO 17664 standard.
Before starting a process:
– Observe suitable personal protective measures against risk of infection.
– Remove all residual blood, cement or composite.
– Remove the bur from the instrument.
– Clean the medical device immediately after treatment of each patient.
Do not immerse the medical device into disinfectants solutions and do not use ultrasonic cleaning units.

CLEANING

Manual external: Carefully clean the surfaces using a clean cloth soaked in a suitable substance. Use also a medium toothbrush and brush off under flowing hot tap water.
Manual internal: Using a suitable spray product, follow corresponding instructions and spray the substance to the internal of the medical device. Immediately after internal cleaning, carry out the disinfection process or the drying process.
Automated: Use a thermodisinfector complying with ISO 15883 standard which is operated with alkaline cleaning agents at a pH of maximum 10.

DISINFECTION

Manual external: Carefully clean the surfaces using a clean cloth soave in a suitable substance (i.e. O-phenylphenol or alcohols based on ethanol). Products not recommended: disinfectants containing benzalkonium chloride, acetone or glutaraldehyde.
Manual internal: Using a suitable spray product, follow corresponding instructions and spray the substance to the internal of the medical device. Immediately after internal disinfection, carry out the OIL lubrication process and/or the sterilization process.
Automated: Use a thermodisinfector complying with ISO 15883 standard which is operated with alkaline disinfectant agents at a pH of maximum 10.

DRYING

Manual: In general use dry and clean air complying to ISO 7494-2 standard.
Automated: The drying phase is normally part of the cleaning program of the thermodisinfector.

STERILIZATION

134°C SSS Sterilize with a steam autoclave with fractioned initial vacuum phase, class B cycle according to the EN 13060 standard.
Sterilize at the nominal temperature of 134 °C (273 °F) for at least 3 min.
Use only demineralised or distilled water.
The device is supplied "not sterile".
The device can be sterilised for at least 1000 times.
The LubriONCE grease lubricator and GYROFLEX® rapid couplings cannot be sterilized.

STORAGE

The processed device must be kept protected from dust and microbial contamination.
Storage temperature: -10 ÷ 70 °C
Storage humidity: 10 ÷ 90 %

GUARANTEE

The device carry a 12-month guarantee against all defects of construction.

SERVICE

In case of irregular noise, head vibrations, bur swinging or any other mulfunction of the instrument, and for any overhaul and repair work, please contact your usual supplier, an authorized service centre, or directly to TKD.