



DENTAL MICROMOTOR

PRODUCT CATALOG

11 Professional Laboratory Micromotor Systems

Precision • Reliability • Performance

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Product Overview

DM 01	Brushless 60,000 RPM Micromotor
DM 02	W-50 PRO Compact Desktop Micromotor
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DM 04	E-Type Brushless Micromotor
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DM 06	Marathon Champion Brush Micromotor
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DM 09	Knee-Control Micromotor
DM 10	Precision Grinding Workstation
DM 11	Dental Lab Crown Maker

Each product is presented on its own page with a large product image, detailed description, and full technical specifications. All systems are designed for dental laboratory use — crowns, bridges, abutments, and precision finishing.

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Description

A high-performance brushless laboratory micromotor engineered for demanding dental lab work. Delivers smooth, powerful rotation up to 60,000 RPM with precise torque control. Ideal for grinding, polishing, and finishing of crowns, bridges, and custom abutments. Features dual control modes (hand and foot pedal), bidirectional rotation, and built-in error alarm with self-diagnosis for safe, reliable daily use.

Technical Specifications

Motor Type	Brushless DC Motor	Maximum Power	300 W
Speed Range	0 – 60,000 RPM	Rotation Direction	Clockwise / Counter-clockwise
Maximum Torque	7.8 Ncm	Control Method	Hand control / Foot pedal
Handpiece Dimensions	L162 × Ø26 mm	Safety Features	Error alarm, Self-diagnosis
Handpiece Weight	217 g		

DM 02 — W-50 PRO Compact Desktop Micromotor



Description

Compact desktop brushless micromotor designed for precision laboratory procedures. Offers excellent speed stability (less than 1% fluctuation) and high torque for efficient material removal. Supports both manual dial and foot-pedal control with forward/reverse and safety delay. Comprehensive protection against overheat, overload, and overcurrent, plus E0–E7 fault codes for quick troubleshooting. Responsive 1.1-second start-up and stop.

Technical Specifications

Motor Type	Brushless DC Motor	Direction Control	Forward / Reverse with safety delay
Max Speed	0 – 50,000 RPM	Safety Protection	Overheat, Overload, Overcurrent
Maximum Torque	9.1 Ncm	Fault Diagnosis	E0–E7 self-inspection codes
Output Power	120 W	Handpiece	150 × Ø28 mm, 232 g
Speed Stability	<1% fluctuations	Control Box	223 × 125 × 155 mm, 2.2 kg
Driving Method	Manual dial or Foot pedal	Dynamic Response	1.1 s start-up / slide to stop



Description

Brushless micromotor with integrated auto-cruise function for continuous hands-free operation during extended laboratory sessions. Combine knob and foot-pedal control in one system. Forward, reverse, and auto-cruise modes support a wide range of finishing and polishing tasks. Compact package suitable for busy dental labs that need reliable, low-maintenance power.

Technical Specifications

Speed	2,000 – 40,000 rpm
Motor Type	Brushless Technology
Package Size	45 × 33 × 36 cm
Shipping Weight	5 kg
Control System	2-in-1 Integration (Knob and Foot Pedal)
Functions	Forward, Reverse, Auto-Cruise

DM 04 — E-Type Brushless Micromotor



Description

ISO-standard E-type brushless micromotor for laboratories that require compatible handpiece connections. Switchable forward and reverse motion with step speed control from 2,000 to 40,000 rpm. Universal AC 100–240 V input makes it ready for use worldwide. Compact control unit and moderate power draw suit everyday finishing, adjusting, and polishing work.

Technical Specifications

Motor	ISO standard E-type brushless
Motion	Switchable forward / reverse
Speed Control	Step speed control
Speed	2,000 – 40,000 rpm
Input Voltage	AC 100–240 V, 50/60 Hz
Power	30 W
Dimensions	6 × 20 × 10 cm
Shipping Weight	3.5 kg



Description

Versatile brushless sensor motor with two selectable speed ranges (0–30,000 RPM and 0–50,000 RPM) to match different materials and tasks. Excellent concentricity (deviation less than 0.02 mm) ensures smooth, accurate cutting. Lightweight handpiece, 2.35 mm chuck, clockwise and anti-clockwise rotation, self-diagnosis, and automatic hand/foot recognition make it a flexible choice for precision laboratory work.

Technical Specifications

Motor	Brushless & sensor motor	Concentricity	Max. deviation < 0.02 mm
Speed Ranges	0–30,000 RPM / 0–50,000 RPM (switchable)	Input Power	300 W
Max. Torque	7.8 Ncm	Input Voltage	AC 110 V / 220 V / 240 V (option)
Handpiece Dimensions	L155 × Ø24 mm	Chuck Size	2.35 mm
Handpiece Weight	183 g	Functions	CW / CCW, Self-diagnosis, Hand/Foot auto-recognition

DM 06 — Marathon Champion Brush Micromotor



Description

Popular Marathon Champion series micromotor known for reliability and everyday practicality. Variable speed up to 35,000 rpm with reduced noise, vibration, and heat. Built-in bur holder, ON/OFF foot pedal, and forward/reverse switch. Works on 110 V or 220 V. Complete set includes the Marathon HT37L1 handpiece (3/32" chuck for HP shank burs), foot pedal, and handpiece cradle — ready to use out of the box.

Technical Specifications

Speed	0 – 35,000 rpm	Performance	Reduced noise, vibration, heat
Design	Compact and portable	Voltage	110 V or 220 V
Speed Control	Variable speed	Handpiece	Marathon HT37L1, 3/32" chuck (HP shank)
Bur Holder	Built-in	Max Handpiece Speed	40,000 rpm
Foot Pedal	ON/OFF style	Set Includes	Control unit, handpiece, foot pedal, cradle
Direction	Forward / Reverse switch		



Description

Classic Strong 204 micromotor with 102L handpiece — a proven choice for dental laboratories. Under-sized compact design, continuous non-stage speed control from 0 to 35,000 rpm, and low-vibration carbon-brush motor. Right/left turning, 2.35 mm bur size, and solid torque output. Complete package includes control box, high-speed handpiece, foot pedal, spare carbon brushes, wrench, and English operation manual.

Technical Specifications

Model	Micromotor 204 + 102L handpiece	Bur Size	2.35 mm
Design	Under-sized compact	Torque	280 GF·cm
Speed	0 – 35,000 rpm	Power	65 W
Motor	Less-vibration carbon brush	Voltage	100 V / 240 V
Speed System	Non-stage (continuous)	Package	Handpiece, foot pedal, control box, 2 carbon brushes, wrench, manual
Direction	Right / Left turning		

BTMARATHON-III
MAX 35,000RPM



Description

BT Marathon-III laboratory micromotor with max 35,000 RPM. Features a less-vibration carbon-brush motor, non-stage speed dial, and protective plastic cover. Portable compact size with a powerful yet efficient control box (30 V, 0.5 A). Forward and reverse switch plus ON/OFF foot pedal. Set includes control box, SDE-H37L1 handpiece (35,000 rpm), foot pedal, and operation manual — a practical all-rounder for daily lab finishing.

Technical Specifications

Max Speed	35,000 RPM	Control Box	30 V, 0.5 A
Motor	Less-vibration carbon brush	Direction	Forward & Reverse switch
Speed System	Non-stage speed dial	Foot Switch	On/Off foot switch
Cover	Protective plastic cover	Handpiece	SDE-H37L1 (35,000 rpm)
Size	Portable and compact	Package	Control box, handpiece, foot pedal, manual



Description

Laboratory micromotor with integrated knee-control pedal for true hands-free operation. Technicians keep both hands on the workpiece while adjusting speed and direction with the knee. A convenient knob provides precise speed adjustment for different materials; a clear indicator shows rotation direction (continuous or reverse). Double-lock handpiece and high torque support detailed prosthesis fabrication with maximum focus and control.

Technical Specifications

Max Speed	50,000 rpm
Max Torque	9.2 Ncm
Handpiece	Double lock
Pedal	Knee Control
Shipping Weight	5 kg
Speed Adjustment	Convenient precision knob
Direction Indicator	Clear rotation / reverse display
Operation	Hands-free knee control



Description

Dedicated precision grinding and polishing workstation for custom implant abutments, crowns, bridges, and other dental prosthetics. High-speed brushless spindle up to 60,000 RPM with encoder control and large display. Electrically controlled swing-arm locking, shadowless light with auxiliary illumination, pneumatic pressure cooling, and a pre-tightening vise for secure positioning. Supports both foot-pedal and manual operation modes for flexible, accurate finishing work.

Technical Specifications

Application	Grinding, polishing & finishing of abutments, crowns, bridges	Swing Arm Stroke	90 mm
Spindle Speed	Up to 60,000 RPM	Spindle Fine Adjustment	25 mm
Spindle Motor	Brushless DC Motor	Dimensions	335 × 246 × 450 mm
Maximum Power	300 W	Weight	20 kg
Spindle Torque	8.3 Ncm	Key Features	Electric swing-arm lock, shadowless light, pneumatic cooling, encoder control, pre-tightening vise
Spindle Concentricity	0.02 mm		



Description

Specialized dental lab crown maker for adjusting margins, walls, and angled shapes of crowns to achieve the perfect fit and appearance for each patient. High motor rotation speed supports efficient, precise contouring. Equipped with water spray, rotate, and auto/foot control for comfortable operation. Dual voltage (220 V / 110 V) and compact 3 kg design suit laboratories of any size. Built to EN 149 safety standard for reliable daily use.

Technical Specifications

Application	Margin, wall & angle adjustment of crowns
Safety Standard	EN 149:2001+A1:2009
Motor Rotation	320,000 rpm
Voltage	220 V / 110 V
Weight	3 kg
Air Tube Diameter	4 mm
Controls	Water spray, rotate, auto / foot control



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