

Integration

Handpiece Overview

a|dec | **KAVO**
EXCELLENCE AMPLIFIED



Elevate your practice with A-dec[®] and KaVo[®].

Dental professionals worldwide choose KaVo for the same reason they choose A-dec: absolute trust in the quality and performance the name represents. Now, two of the most respected names in the dental industry are collaborating to bring you unparalleled performance with effortless integration.

That's Excellence Amplified.

KaVo's impressive range of air-driven, electric, and hygiene handpieces are the ideal match for the legendary quality and reliability of A-dec dental chairs, delivery systems, dental lights, dental furniture, and mechanical room equipment. Enjoy an exceptional practice experience, with premier equipment that complements your professional expertise—and reflects your commitment to superior patient care.

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EXCELLENCE AMPLIFIED



SEAMLESS INTEGRATION MADE EASY.

KaVo is committed to creating the best air-driven, electric, and hygiene solutions available. And now that they can be easily integrated into your A-dec delivery system, you can put the power of precise German design and engineering in the palm of your hand.

A-dec delivery systems accommodate a full range of KaVo handpieces. When you're using a KaVo integrated electric motor, it communicates directly with your A-dec 300 Pro Control Pad 5i or 500 Pro Dynamic Screen 7 for full control of your instruments, including speed adjustment, torque control, auto-reverse and reciprocating endodontic functions.





With a single A-dec touchpad as your control center, easily access your KaVo handpieces and electric motors, as well as ultrasonic instruments, curing lights, dental lights and other technology. Devices that once required separate boxes, additional wiring, or cumbersome tubing can now be neatly integrated.

It's a smart, efficient, and more streamlined way to practice.

ELECTRIC COLLECTION



Master Series

[The pinnacle of KaVo innovation](#)

Featuring the MASTERmatic™ LUX M25 L and MASTERmatic LUX M05 L Mini high-speeds with KaVo's smallest head size yet on an electric attachment. The Master Series premium electric handpieces feature a triple-gear system for smooth, reliable operation and angles for superior access.

Expert Series

[Superior KaVo performance](#)

Experience fast, precise performance with the EXPERTmatic™ series attachments, designed with snap-on facility and ceramic bearings. The Expert Series features quality stainless steel construction and advanced hygienic solutions.

By combining KaVo's smallest head size—for best access and visibility—with a reliable triple-gear system and a short, lightweight motor, KaVo provides you with the ideal electric system for synchronized efficiency.

Smart Series

The easily accessible KaVo choice

The KaVo SMARTmatic™ series is perfect for anyone wishing to combine the highest standards in reliability with amazing performance. SMARTmatic attachments offer a broad spectrum of treatment options for restorative, endodontic and prophylaxis procedures.

ELECTRIC HIGH-SPEED COLLECTION



MASTERmatic LUX M25 L

KaVo's patented triple-gear MASTERmatic handpiece sets the gold standard for precision, reliability, and quiet operation. With a head size 20% smaller than its industry-leading predecessor and a chuck system with an extremely low 32N bur retention force rating, the M25 L is in a class all its own.

Transmission type	Speed increasing 1:5
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MASTERmatic LUX M05 L Mini

Featuring KaVo's smallest head (43% smaller than the best-selling GENTLEpower™ 25 LPR), the M05 L Mini utilizes the same triple gear system as the M25 L. Its tungsten carbide chuck system ensures maximum bur concentricity and exceptional precision during operation.

Transmission type	Speed increasing 1:5
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EXPERTmatic LUX E25 L

Enjoy improved treatment efficiency and accessibility with the smaller head size of the KaVo E25 L. Its ergonomic EXPERTgrip ensures better handling and grip. Higher chuck strength holds the bur firmly in place and delivers precise cutting performance.

Transmission type	Speed increasing 1:5
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INTRA™ LUX KL 703 LED Electric Motor

POWERFUL AND STERILIZABLE ELECTRIC MOTOR

Short, light, compact, and sterilizable e-motor with constant torque for precision cutting with endless power.

Torque	Max. 3.0 Ncm
LED bulb intensity	25,000 LUX
Motor speed range	100-40,000 rpm



ELECTRIC LOW-SPEED COLLECTION



MASTERmatic LUX M20 L

The KaVo MASTERmatic LUX M20 L low-speed handpiece allows for optimal access and maximum precision for all procedures. It's simple and easy to integrate with KaVo's INTRA LUX heads.

Feature Highlights	Low-speed Contra-angle
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Transmission type	1:1
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EXPERTmatic LUX E20 L

The EXPERTmatic E20 L is a 1:1 transmission attachment with a dent-resistant steel head for durability and EXPERTgrip for comfort and confidence. Its smaller head size, ceramic bearings, and snap-on facility ensure fast, precise performance.

EXPERTmatic version	Low-speed Contra-angle
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Transmission type	1:1
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EXPERTmatic E10 C

Experience speed and precision when working with the EXPERTmatic straight attachment for extra-oral adjustments. A 1:1 handpiece equipped with KaVo's EXPERTgrip, the E10 C offers you confident, non-slip control.

EXPERTmatic version	Non-optic
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Transmission type	1:1
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INTRA LUX L68 B Latch

(Use with M20 L)

Ideal for removing carious materials, and preparation of the cavity floor.

INTRA LUX version	Operative latch
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Transmission type	1:1
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INTRA LUX L66 B Latch

(Use with M20 L)

Ideal for removing carious materials, preparation of the cavity floor, and rotating preparation of root canals with NiTi files.

INTRA LUX version	Endodontics
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Transmission type	3:1 reduction
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INTRA LUX KL 703 LED Electric Motor

SMART AND COMFORTABLE ELECTRIC SHORT MOTOR

KaVo's SMARTdrive™ technology allows for smooth, ergonomic working and constant torque, even at low rpms.

Torque	Max. 3.0 Ncm
LED bulb intensity	25,000 LUX
Motor speed range	100-40,000 rpm



SMARTmatic S81

The SMARTmatic S81 is a versatile handpiece for endodontic procedures, uniting trusted KaVo quality with smart features. Utilizing a unique one-piece design, it combines superior KaVo quality with amazing performance, reliability, versatility, and efficiency.

Primary indication(s)	Endodontics
Operating Speed Transmission	8:1
Maximum operating speed (rpm)	5,000
Chuck System	Latch type

ROTARY AND RECIPROCATING ENDO ENABLED

Bring a valuable new level of functionality to your A-dec delivery system with an integrated KaVo electric motor. Your A-dec Dynamic Screen 7 or Control Pad 5i support endo functionality through KaVo's KL 703 LED electric motor. Choose from rotary or reciprocating endo motions, including a special adaptive motion for use with Kerr's TF Adaptive endo file system. TF Adaptive Technology changes the motion of the file based on the applied load to the file, which gives you the benefits of both rotary and reciprocation at exactly the right moment.



INTRA LUX KL 703 LED Electric Motor

VERSATILE AND SAFE ELECTRIC SHORT MOTOR

With both rotary and reciprocating motion capabilities, KaVo's KL 703 motor, in combination with A-dec's delivery, offers a singular, versatile system for many endodontic cases.

Torque	Max. 3.0 Ncm
LED bulb intensity	25,000 LUX
Motor speed range	100-40,000 rpm

AIR-DRIVEN COLLECTION

KaVo MASTERtorque™ premium air-driven handpieces feature superlative performance with up to 31 watts of power. The patented design offers superior access and visibility, especially in the posterior. Extremely well-balanced turbines ensure exceptionally quiet operation reducing noise levels to help protect your hearing and create a more relaxing environment for you and your patients.

Master Series

High-Speed

The pinnacle of KaVo innovation

Featuring the MASTERtorque handpiece with unique Direct Stop Technology™ for improved bur control and reduced drawback of contamination. Now with even higher power and the same low noise level for the highest treatment quality and patient comfort. KaVo's MASTERtorque premium air-driven handpieces feature superlative performance with an ergonomic design, offering superior access and visibility. The extremely well-balanced turbines offer exceptionally quiet operation.

Expert Series

High-Speed

Superior KaVo performance

Featuring EXPERTtorque™ E679 L standard head and EXPERTtorque Mini LUX E675 L handpieces with innovative design and EXPERTgrip. The KaVo Expert Series collection offers quality air-driven handpieces that are powerful, smooth, and quiet.



Smart Series

High-Speed

The easily accessible KaVo choice

Reliable and affordable technology featuring SMARTtorque™ LUX S619 L standard head and S615 L Mini head handpieces. Enjoy faster and smoother cutting for preparations. KaVo Smart Series dental handpieces provide reliable performance you can count on.

Low-Speed

Reliable, affordable KaVo technology

The KaVo SMARTmatic series unites KaVo's trusted quality with smart features for optimal ease of use and successful clinical outcomes. As a successor to the INTRAmatic™ E/ES series, our SMARTmatic handpieces compliment the Master and Expert Series to offer you a versatile solution for low-speed applications.

AIR HIGH-SPEED COLLECTION



MASTERtorque LUX M8900 L

KaVo's most powerful and amazingly quiet high-speed air handpiece. At 31 watts, the MASTERtorque M8900 L has 20% more power than its predecessor. Its very quiet effective frequency optimization of only 57 dB(A) and patented Direct Stop Technology set the standard for patient safety.

Head size	Standard
Features	31 watts of power
	Direct Stop Technology



MASTERtorque Mini LUX M8700 L

The M8700 L is KaVo's quietest mini head high-speed at 59 dB(A). Better access even with a 19mm bur, the total head height is only 20mm. It features 11% more power at 30 watts, and Direct Stop Technology.

Head size	Mini
Features	30 watts of power
	Direct Stop Technology

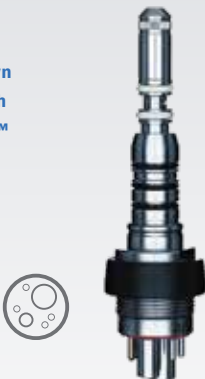


EXPERTtorque LUX E679 L

The EXPERTtorque LUX E679 L is the ideal handpiece for crown and bridge work and gross reduction. Powerful, smooth, and quiet, it provides superior KaVo performance even in difficult-to-access molar regions.

Head size	Standard
Features	29 watts of power
	EXPERTgrip

The attachments shown above can be used with these KaVo MULTIflex™ couplers.



460 LED MULTIflex LUX Coupler

6-PIN CONNECTION

A 6-pin fiber optic coupler with multi LED bulb and anti-retraction valve. Sterilizable.



457 MULTIflex Coupler

4-HOLE NON-OPTIC CONNECTION

A 4-hole, non-optic coupler for use with the high-speed air attachments shown above. Sterilizable.



EXPERTtorque Mini LUX E675 L

Powerful, smooth, and quiet, KaVo's EXPERTtorque E675 L handpiece provides excellent bur concentricity to deliver superior cutting performance and faster, smoother preps. The mini head offers excellent access for precise KaVo performance even in difficult-to-access molar regions.

Head size	Mini
Features	27 watts of power
	EXPERTgrip



SMARTtorque LUX S619 L

KaVo SMARTtorque E675 L handpieces offer superior quality and exceptional performance with straightforward design, meeting the everyday needs and demands of a high-speed handpiece.

Head size	Standard
Features	26 watts of power
	Optimum balance of speed and torque



SMARTtorque Mini LUX S615 L

With a smaller head size, the SMARTtorque S615 L features balanced turbine cartridges, a unique angular design, quiet operation, and smoother, vibration-free performance.

Head size	Mini
Features	22 watts of power
	Optimum balance of speed and torque



1390 MULTIflex LUX Coupler

5-HOLE CONNECTION

A 5-hole coupler with anti-retraction valve used with any 5-hole tubing. Sterilizable.

LOW-SPEED COLLECTION

The SMARTmatic Series unites trusted KaVo quality with smart features for optimal ease of use and successful clinical outcomes. An attractive complement to KaVo's Master and Expert handpieces, the SMARTmatic Series offers an easily accessible entry into the world of KaVo.

Optimized for CDC Compliance

SMARTmatic's one-piece handpiece sleeve is critical to reduce the number of steps required for the proper cleaning and sterilization recommended by the CDC. Similar handpieces have multiple pieces that must be disassembled before sterilization, or have rough/ringed areas that make cleaning difficult. SMARTmatic's seamless surfaces allow for rapid cleaning and improved hygiene.



Premium materials

Rust-free stainless steel for long-lasting durability and low cost of ownership.

- Extremely durable ball bearings for long-lasting smooth operation and a high degree of efficiency.
- Stainless steel construction leads to longer useful life, ultimately lowering your repair or replacement costs.

Smart design

Ergonomic design provides better visibility and balance for precise treatment.

- Lightweight, perfectly balanced design.
- Small head dimensions enable the best view of the treatment area for precise work.

SMARTmatic Series



SMARTmatic S20 K

A contra-angle option in the SMARTmatic Series, designed for optimal ease of use and successful clinical outcomes. Featuring a unique one-piece design, the S20 K brings impressive reliability, versatility, and efficiency together with trusted KaVo quality.

Primary indication(s)	Restorative
Operating speed transmission	1:1
Maximum operating speed attached to 181K motor (rpm)	20,000
Chuck system	Latch type



SMARTmatic S10 K

The SMARTmatic Series unites trusted KaVo quality with smart features for optimal ease of use and successful clinical outcomes. Utilizing a unique one-piece design, the S10 K offers superior quality with amazing performance, reliability, versatility, and efficiency.

Primary indication(s)	Restorative
Operating speed transmission	1:1
Maximum operating speed attached to 181K motor (rpm)	20,000
Chuck system	Latch type



SMARTmatic S19 K

The SMARTmatic S19 K is a small, lightweight tool ideal for everyday prophylaxis treatments. Ergonomically designed for optimal ease of use, it is universally compatible with Doriot connections following ISO 14457.

Primary indication(s)	Prophy
Operating speed transmission	8:1
Maximum operating speed (rpm)	2,500
Chuck system	Doriot

The attachments shown above can be used with this KaVo motor system.



INTRA 181K Air Motor

Lightweight, superior performance with better ergonomics. Non-optic design, with a 4-hole connection and speed range up to 20,000 rpm.



SMARTmatic S31 K

The S31 K offers superior quality with amazing performance, reliability, and efficiency for prophylaxis treatments.

Primary indication(s)	Prophy
Operating speed transmission	8:1
Maximum operating speed (rpm)	2,500
Chuck system	Snap-on



SMARTmatic S80 K

The S80 K offers one-piece design, ceramic slider clamping system and ball bearings for smooth operation.

Primary indication(s)	Restorative
Operating speed transmission	1:1
Maximum operating speed (rpm)	20,000
Chuck system	Friction grip



PUT A KAVO POLISH ON YOUR HYGIENE OPTIONS.



PROPHYwiz™ 181P

The **PROPHYwiz 181P** is an ultra light, well-balanced handpiece that minimizes hand fatigue, making polishing easy and more enjoyable.



PROPHYwiz 181P

An easy, affordable integration experience, the PROPHYwiz 181P runs smoothly and quietly to optimize patient comfort. If you want the most comfortable polishing handpiece to maximize productivity and make polishing easier and more enjoyable, this is the right choice for you.



MAINTAIN AND SUSTAIN YOUR KAVO HANDPIECES.

The KaVo QUATTROcare™ Plus handpiece maintenance system cleans, lubricates, and purges your instruments with just the push of a button. Simple operation and loading make it fast and easy to use, reducing staff downtime.

Maintenance with the QUATTROcare Plus system means less wear, fewer repairs, smoother operation, and increased longevity of your handpieces. Purchase of a QUATTROcare Plus system automatically extends the warranty* on KaVo MASTER and EXPERT attachments.



Large capacity

Process up to four (4) handpieces or air motors in the same cycle.



Safe, controlled cleaning

Completely controlled cleaning and purging procedure.



Economical investment

Can be used for virtually all manufacturers' handpieces, air-driven scalers and air motors.



Fast cleaning cycle

Cycle time of up to 45 seconds per handpiece.



Chuck care maintenance

Chuck care system provides easy maintenance of handpiece chuck.



**Extended warranty applies to U.S. and Puerto Rico purchases only.*

KaVo QUATTROcare Plus

Correct maintenance of your dental instruments is critical to ensure top performance and longevity. The QUATTROcare Plus can be used for virtually all manufacturers' high-speeds, low-speed contra-angles, straight handpieces, air-driven scalars, and air motors.

The system comes with two MULTIflex™ adapters, two INTRAMatic adapters (E-type ISO 3964), and one can of QUATTROcare Plus spray*.

Dimensions

- Height: 15", Width: 13 9/16", Depth: 11 1/2"
- Weight: 22 lbs

Technical

- 120V, 50/60Hz, 20 amps electrical connection
- Air consumption: 50 mL/min or 1.765 cfm
- Easily connects to 1/4" airline
- 58 to 87 psi air pressure recommended (max 145 psi)
- Built-in, automatic pressure regulator controls flow

**Additional adapters available.*

Easy As 1, 2, 3.

Clean, lubricate, and purge your KaVo instruments in three simple steps.



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Direct Stop Technology, ELECTROtorque, EXPERTgrip, EXPERTtorque, EXPERTmatic, GENTLEpower, INTRA LUX, INTRAmatic, MASTERmatic, MASTERtorque, MULTIflex, PROPHYwiz, SMARTdrive, SMARTtorque, SMARTmatic and QUATTROcare are registered trademarks of KaVo Dental in the United States and/or other countries.

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