

 Bluetooth® Wireless Foot Control



Velocity<sup>ALPHA</sup> highspeed surgical drill system

 Bluetooth®



 adeor  
M E D I C A L

# Velocity<sup>®</sup> ALPHA

HIGHSPEED SURGICAL DRILL SYSTEM

*10% more power\**

*20% smaller\**

*Reduced thermal warming*

\*compared to previous Velocity<sup>®</sup> generation

Launching the Velocity<sup>®</sup> Alpha attachment series in 2015 was a major milestone for adeor.

A true universal cutter system, one-click easy coupling and in-built telescoping were created to meet needs of today's OR personnel. We continued to listen to our customers and utilised their feedback and requirements to design a new generation of our electric high speed drill system. We listened to surgeons and nurses who emphasised the importance of less thermal warming, ease of use for their equipment and a desire to reduce cables around the operating table. The result is our new Velocity<sup>®</sup> Alpha system. Reliable, easy to use and packed with unique features.

*Der Marktstart der Velocity<sup>®</sup> Alpha Handstücke in 2015 war ein Meilenstein für adeor. Features wie der Universalfräser, die 1-Klick Kupplung und die eingebaute Teleskopfunktion für Fräser wurden realisiert um den Bedürfnissen der Anwender optimal gerecht zu werden. Das neue Velocity<sup>®</sup> Alpha System tritt nun an um unseren Anwendern weitere entscheidende Vorteile an die Hand zu geben. Dazu gehört neben einem kabellosen Fußpedal insbesondere eine deutlich reduzierte Erwärmung des Motors unter hoher Belastung.*

*Wireless Bluetooth<sup>TM</sup> Foot Control*

*80.000 rpm*

*Touch Screen*

*27 Languages*

*Low noise level\**

\* < 53 dBA motor noise level acc.to ISO 11498

## *The universal cutter system*

*80% less inventory cost / different cutter models*

*No more cutter identification hassles*

*Adjustable cutter exposure*

*Easiest handling*

UNIVERSAL  
CUTTER



## Velocity<sup>®</sup> Alpha universal cutter system

### UNIVERSAL CUTTER

#### > 80% less cutter codes and inventory cost

Instead of more than 200 to 300 different cutters and product codes, Velocity<sup>®</sup> Alpha only has 50 codes without compromising variety. This means less stock requirement and free cash-flow for the hospital.

#### > 80% weniger Fräsermodelle und Lagerkosten

Mit dem Velocity<sup>®</sup> Alpha System konnte adeor die Anzahl der verschiedenen Fräsermodelle von bisher 200 - 300 auf nur 50 reduzieren. Und das ohne Einschränkungen für den Operateur. Dies bedeutet ein deutlich reduziertes Lager und weniger gebundenes Kapital für das Klinikum.

#### > no more cutter identification

Warehouse managers, nurses, surgeons, purchasing officers will all benefit from the simplicity of the universal cutter design. Less codes mean less hassle.

#### > Keine Fräserzuordnung mehr nötig

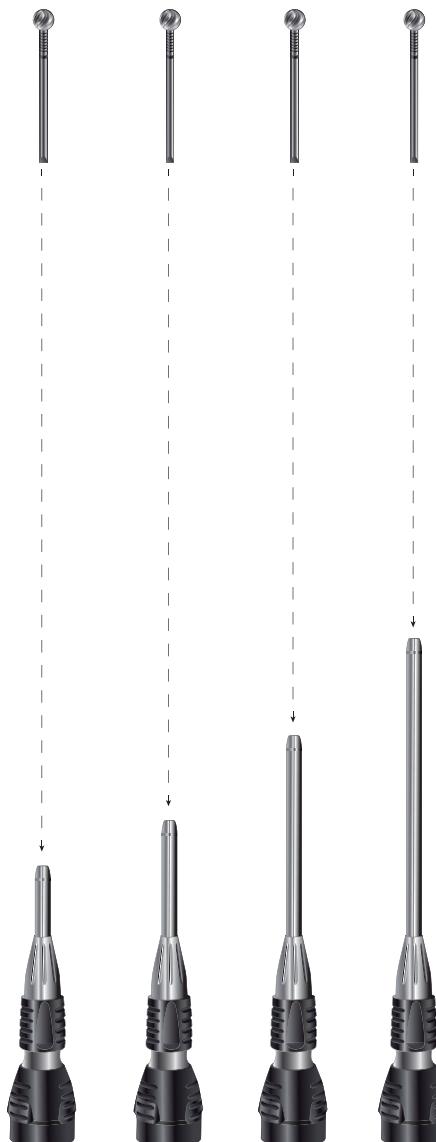
Das revolutionäre adeor Velocity<sup>®</sup> Alpha Universalfräser-System vereinfacht den Alltag von Chirurgen, Schwestern und Einkäufern. Weniger Fräser bedeuten weniger Stress für alle Beteiligten.

#### > Improved safety

The common risk of using the wrong cutter with the wrong nosepiece is eliminated.

#### > Verbesserte Sicherheit

Durch das Universalfräser-System wird das Risiko, den falschen Fräser für die entsprechende Schafführung zu wählen, komplett ausgeschlossen.

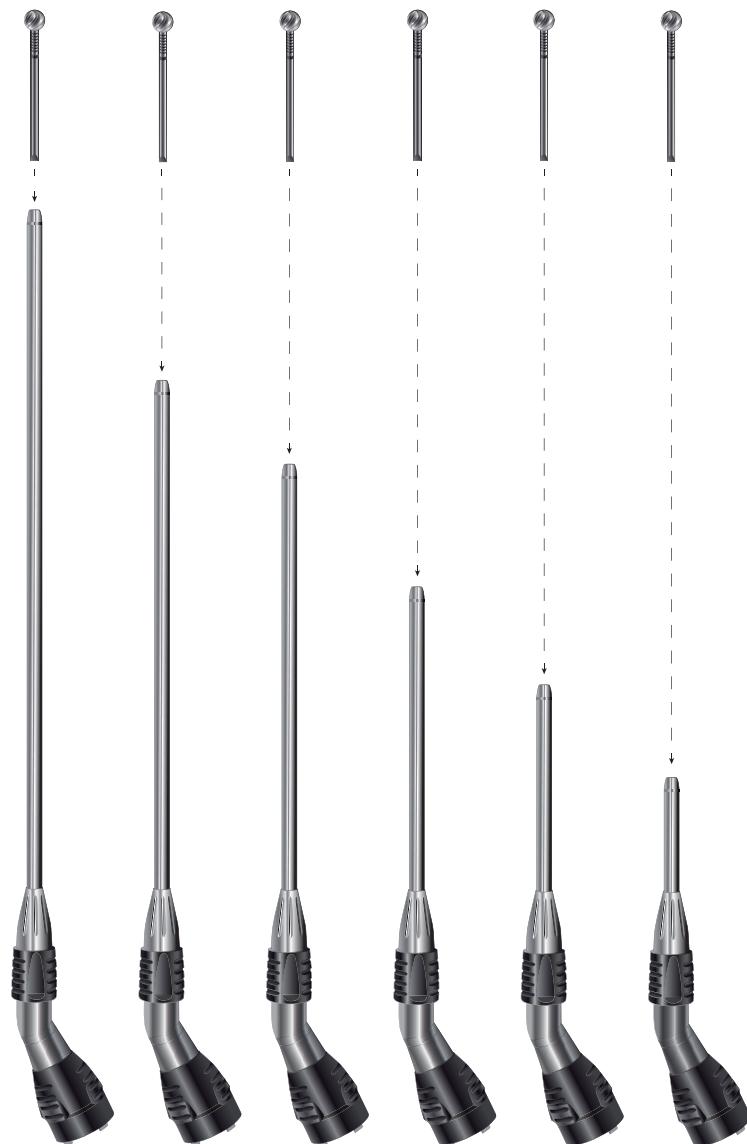


## UNIVERSAL CUTTER



One universal cutter for all straight and angled Velocity® Alpha nosepieces.

*Ein universeller Fräser für alle geraden und gewinkelten Velocity® Alpha Schafführungen.*



## VARIABLE EXPOSURE



One cutter - 8 exposure positions.  
Peerless flexibility.

Ein Fräser - 8 Längen.  
Einzigartige Flexibilität.



### > variable cutter exposure

Depending on the procedure, surgical area and other factors, surgeons want cutters to protrude more or less from the nosepiece. Now, they can select from 8 different positions for each tool (exposure range = 8 mm).

### > variable Fräserlänge

Je nach Operation und anatomischer Gegebenheit sind verschiedene Ausfahrlängen der Fräser sinnvoll. Mit dem Velocity® Alpha System haben Sie die Möglichkeit aus 8 Ausfahrlängen der Fräser zu wählen (in 1 mm Schritten).

## ONE-CLICK COUPLING



One click coupling mechanism.  
No twisting, no pulling, no headache.

1-Klick Kupplung.  
Kein Schrauben, kein Ziehen, keine Probleme.

### > one-click coupling

Inserting, removing or changing cutters has never been easier. To insert the tool, simply push the cutter into the nosepiece until you hear and feel the "click". That's it. Less training, less risk of errors. OR Time is expensive. The automatic one-click coupling system saves significant time, during set-up as well as intra-operative.

Das Einsetzen von Fräsern sowie der gesamte Systemaufbau waren nie einfacher. Mit dem Velocity® Alpha System genügt ein simples Aufstecken - das ist alles. Ein gut hörbares Klicken signalisiert den korrekten Zusammenbau.

One click to connect any cutter



One click to connect any attachment





## Straight nosepieces

Super slim - packed with unique features.

Velocity<sup>®</sup> Alpha straight nosepieces are designed with the toughest challenges in microsurgical procedures in mind. They are built to last and offer reliable performance without excessive heat, vibration or noise. All Velocity<sup>®</sup> Alpha nosepieces offer a unique set of features:

- > Universal cutter system
- > Variable cutter exposure
- > One click coupling
- > Super slim shaft diameter

*Minimale Größe gepaart mit maximalen Features.*

*Velocity<sup>®</sup> Alpha Schafführungen sind für die härtesten Anforderungen im OP Alltag ausgelegt. Sie zeichnen sie sich durch minimale Erwärmung, hohe Lebensdauer sowie ein geringes Geräuschniveau aus.*

- > Universalfräser System
- > Variable Fräserlänge
- > 1-Klick Kupplung
- > Extra dünner Schaftdurchmesser

**NEW**

### VMN-XS

**extra short** attachment straight (without telescoping)

working length 22 mm

total length 92 mm

### VMN-S1

**short** attachment straight

working length 40 mm

total length 110 mm

### VMN-S2

**medium** attachment straight

working length 70 mm

total length 140 mm

### VMN-S3

**long** attachment straight

working length 100 mm

total length 170 mm



## Angled nosepieces

Super slim - packed with unique features.

Velocity<sup>®</sup> Alpha angled nosepieces are designed with the toughest challenges in microsurgical procedures in mind. They are built to last and offer reliable performance without excessive heat, vibration or noise. All Velocity<sup>®</sup> Alpha nosepieces offer a unique set of features:

- > Universal cutter system
- > Variable cutter exposure
- > One click coupling
- > Super slim shaft diameter
- > 25° angulation for enhanced vision

*Minimale Größe - gepaart mit einem Maximum an Features.*

*Velocity<sup>®</sup> Alpha Schaffführungen sind für die härtesten Anforderungen im OP Alltag ausgelegt. Dabei zeichnen sie sich durch minimale Erwärmung, hohe Lebensdauer sowie ein geringes Geräuschniveau aus. Alle Velocity<sup>®</sup> Alpha Schaffführungen bieten eine einzigartige Kombination an Features:*

- > Universalfräser System
- > Variable Fräserlänge
- > 1-Klick Kupplung
- > Extra dünner Schaftdurchmesser
- > 25° Winkelung für eine verbesserte Sicht

### VMN-A1

**short** attachment angled  
working length 40 mm  
total length 120 mm

### VMN-A2

**medium** attachment angled  
working length 70 mm  
total length 150 mm

### VMN-A3

**long** attachment angled  
working length 100 mm  
total length 180 mm

### VMN-A4

**xl** attachment angled  
working length 130 mm  
total length 210 mm

### VMN-A5

**xxl** attachment angled  
working length 170 mm  
total length 250 mm

### VMN-A6

**xxxl** attachment angled  
working length 220 mm  
total length 300 mm



## Craniotomy attachments

### Modular setup

The Velocity® Alpha craniotomy attachments consist of a combination of a solid heavy duty craniotome base which can be coupled with six different duraguards. The duraguards are available in three lengths, fixed or rotatable. The duraguard design facilitates smooth and fast cutting:

- > One click coupling
- > Super slim design

### Modularer Aufbau

Die Velocity® Alpha Kraniotomie-Aufsätze bestehen aus einem soliden Kraniotomfuss auf welchen 6 verschiedene Duraguards aufgeschraubt werden. Die Duraguards sind in 3 verschiedenen Längen erhältlich, fixiert oder steuerbar. Das Design der Durguards erleichtert eine schnelle und reibungslose Kraniotomie:

- > 1-Klick Kupplung
- > Extra schlankes Design

### VMN-C1

#### craniotome base

holds fixed and rotatable duraguards  
Safety lock mechanism

### VMCH-1

**short** duraguard  
12 mm cutting width  
fixed version

### VMCH-2

**medium** duraguard  
15 mm cutting width  
fixed version

### VMCH-3

**long** duraguard  
22 mm cutting width  
fixed version

### VMCH-1R

**short** duraguard  
12 mm cutting width  
rotatable version

### VMCH-2R

**medium** duraguard  
15 mm cutting width  
rotatable version

### VMCH-3R

**long** duraguard  
22 mm cutting width  
rotatable version



NEW

### VMCH-D

**craniotome head**  
to be used with short, medium  
or long craniotome cutters

## Speed reducer

> Ergonomic shape. High torque.

The Velocity® Alpha speed reducer is designed for fast and efficient cranial perforation. For best performance please use adeor Meridian™ cranial perforators (see pages 20-21).



> Ergonomische Form. Hohes Drehmoment.

Der Velocity® Alpha speed reducer wurde für die schnelle und effiziente Trepanation entwickelt. Für ein optimales Ergebnis empfehlen wir die Verwendung von adeor Meridian™ Perforatoren (siehe S. 20-21).

## Highspeed motor

> High speed and torque - minimal thermal warming.

Taking advantage of the continuous developments for brushless electric motors, the new Velocity® Alpha high speed motor offers reduced dimensions for improved ergonomics, an increase in power and torque but also reduced thermal warming (compared to VMM-100EC) and a tougher, more sturdy cable connection to better withstand the daily routine in operating rooms and sterile processing departments.

NEW



OLD



> Highspeed und hohes Drehmoment - minimale Erwärmung.

Durch die technischen Fortschritte im Bereich der bürstenlosen Elektromotoren waren wir in der Lage, den neuen Velocity® Alpha Highspeed Motor deutlich kleiner und gleichzeitig stärker auszulegen. Auch in den Bereichen Haltbarkeit und Erwärmungsverhalten ist der neue Velocity® Alpha Highspeed Motor seinem Vorgänger deutlich überlegen.

NEW

### VMT-102E

#### Speed reducer

attaches to all cranial perforators with hudson fitting  
high torque / 1:64 ratio

### VAM

**80.000 rpm** highspeed motor  
with integrated 3.5 m cable  
autoclavable < 134°C

**NEW**

## Velocity<sup>®</sup> Alpha Control Unit

The challenge for our new control unit was to combine the flexibility and customisation benefits of a touch screen unit with the simplicity and ease of use that OR personnel was accustomed to from the Velocity<sup>®</sup> control unit. The Velocity<sup>®</sup> Alpha control achieves this through a user interface that still offers a simple “switch on and get started” approach but also a vast range of customisation options, including start and stop speed of the motor, foot control settings and more. With 27 in built languages to choose from, the Velocity<sup>®</sup> Alpha unit caters for all nationalities and markets.

One of the recurring demands from surgeons and nurses is the wish to reduce cable clutter around the operating table. We answer this demand with the introduction of the wireless foot pedal. Using state-of-the-art Bluetooth<sup>™</sup> technology, surgeons can move around the operating table freely and without the risk of tripping.

Die neue Velocity<sup>®</sup> Alpha Steuereinheit kombiniert die Vorteile individueller Einstellbarkeit mit einer intuitiven Bedienung. Der Anwender kann zwischen einer plug&play Option mit voreingestellten Standardwerten und der Möglichkeit eines individuell angepassten Anwenderprofils wählen. Das Motor- und Fußpedalverhalten ist einstellbar. Die neue Generation der Velocity<sup>®</sup> Alpha Steuereinheit bietet 27 vorinstallierte Menüsprachen.

Dem häufig geäußerten Wunsch nach weniger Kabeln im Operationssaal entsprechen wir mit der Einführung des kabellosen Bluetooth<sup>™</sup> Fußpedals. Das Fußpedal ist frei im Operationssaal positionierbar.



 Bluetooth™

**VAC220 / VAC110**

Control unit with integrated irrigation pump and wireless Bluetooth™ foot control

*Steuereinheit mit integrierter Spülpumpe und kabellosem Bluetooth™ Fußpedal*



Motor cable safety socket

*Sicherheitsstecker Motorkabel*



Illuminated touchscreen

*Beleuchteter Touchscreen*



Integrated irrigation pump

*Integrierte Spülpumpe*

**WIRELESS FOOT CONTROL**

- > Large, easy to find foot print
- > Wide-angle accessibility
- > 3 color-coded program buttons
- > Accelerator or On/Off Mode
- > Safety guard
  
- > Sicherer Halt auf dem OP-Boden
- > Leicht mit dem Fuß zu ertasten
- > 3 farbcodierte Funktionstasten
- > Gaspedal- oder An/Aus Modus
- > Sicherheitsbügel

**NEW**

**VAFCBT**  Bluetooth™

Wireless water-proof foot switch

*Kabelloser Fußschalter - wasserdicht*


**VAFC**

Wired water-proof foot switch. Integrated 3 m cable.

*Kabelgebundener Fußschalter ( 3 m ) - wasserdicht*

## Accessories

### Custom PPSU sterilization tray

- > secure reprocessing and storage
- > customized inlays for proper fit of all components
- > pictograms for ease of use
  
- > sichere Aufbereitung und Lagerung
- > sicherer Halt aller Systemkomponenten
- > Piktogramme für einfache Handhabung



### Custom stainless steel sterilization tray

**NEW**



### Velocity<sup>®</sup> Alpha cleaning adapter & oil-spray

**NEW**

- > for internal rinsing of nosepieces
- > simultaneous cleaning of up to 4 nosepieces
- > oil spray OS-100 to be used with adapter OA-100
  
- > zur optimalen Innenreinigung der Handstücke
- > gleichzeitige Reinigung von bis zu 4 Handstücken
- > Ölspray OS-100 zur Verwendung in Verbindung mit OA-100 Adapter



#### PST-200

#### sterilization tray PPSU plastic

custom made inlays  
autoclavable < 134°C

#### PST-201

#### sterilization tray stainless steel

custom made inlays  
autoclavable < 134°C

#### OA-100

#### oil-spray adapter

screw-on profile  
autoclavable < 134°C

#### OS-100

#### oil-spray

500 ml can  
12 cans per box

#### CA-100

#### cleaning adapter

for internal nosepiece irrigation  
simultaneous cleaning of 4 nosepieces

## Irrigation tubing set and adapters

- > customized irrigation adapters available for all nosepieces
  - > can be connected to single-use sterile tubing set
  - > targeted irrigation of drilling area
  - > adjustable flow rate
- 
- > spezielle Spüladapter sind für alle Schaffführungen erhältlich
  - > zur Verwendung mit steril erhältlichen Spülschlauch-Sets
  - > einstellbare Durchflussrate
  - > punktgenaue Spülung



### VMM-ITS-6

#### irrigation tubing set

6 pcs. per box  
sterile packed

### VMN-IR-XS

#### extra short irrigation adapter

compatible with Velocity Alpha nosepieces  
VMN-XS

### VMN-IR-1

#### short irrigation adapter

compatible with Velocity Alpha nosepieces  
VMN-S1 and VMN-A1

### VMN-IR-2

#### medium irrigation adapter

compatible with Velocity Alpha nosepieces  
VMN-S2 and VMN-A2

### VMN-IR-3

#### long irrigation adapter

compatible with Velocity Alpha nosepieces  
VMN-S3 and VMN-A3

### VMN-IR-4

#### xl irrigation adapter

compatible with Velocity Alpha nosepiece  
VMN-A4

### VMN-IR-5

#### xxl irrigation adapter

compatible with Velocity Alpha nosepiece  
VMN-A5

### VMN-IR-6

#### xxxl irrigation adapter

compatible with Velocity Alpha nosepiece  
VMN-A6

Velocity<sup>®</sup> Alpha System overview

&gt; Straight attachments



&gt; Duraguards and craniotome base



&gt; Angled attachments



> Speed reducer



VMT-102E  
1:64 ratio

> Irrigation tubing set & adapters



See page 15  
for details

> Highspeed motor



VAM  
80.000 rpm

> Cleaning adapter and oil



See page 14  
for details

> Control unit



VAC220 or VAC110  
control unit with irrigation

> Sterilization trays



PST-201  
stainless steel sterilization tray

> Foot controls



VAFCBT or VAFC  
Bluetooth™ or wired



PST-200  
PPSU sterilization tray

Velocity<sup>®</sup> Alpha universal cutter range

## UNIVERSAL CUTTER



*One* universal cutter for all Velocity<sup>®</sup> Alpha nosepieces.  
*Ein* universeller Fräser für alle Velocity<sup>®</sup> Alpha Schafführungen.

**Balltip / Kugel**

**universal cutter**  
Velocity Alpha  
single-use sterile

**B10** Ø 1.0 mm  
**B15** Ø 1.5 mm  
**B20** Ø 2.0 mm  
**B32** Ø 3.2 mm  
**B40** Ø 4.0 mm  
**B48** Ø 4.8 mm  
**B64** Ø 6.4 mm

**Diamond Ball**

**universal cutter**  
Velocity Alpha  
single-use sterile

**DB08** Ø 0.8 mm  
**DB10** Ø 1.0 mm  
**DB15** Ø 1.5 mm  
**DB21** Ø 2.1 mm  
**DB33** Ø 3.3 mm  
**DB42** Ø 4.2 mm  
**DB50** Ø 5.0 mm  
**DB60** Ø 6.0 mm

**Diamond Ball coarse / grob**

**universal cutter**  
Velocity Alpha  
single-use sterile

**DBC08** Ø 0.8 mm  
**DBC10** Ø 1.0 mm  
**DBC15** Ø 1.5 mm  
**DBC21** Ø 2.1 mm  
**DBC33** Ø 3.3 mm  
**DBC42** Ø 4.2 mm  
**DBC50** Ø 5.0 mm  
**DBC60** Ø 6.0 mm

**Oval**

**universal cutter**  
Velocity Alpha  
single-use sterile

**OV40** Ø 4.0 mm  
**OV55** Ø 5.5 mm

**Neuro Matchstick**

**universal cutter**  
Velocity Alpha  
single-use sterile

**N10** Ø 1.0 mm  
**N18** Ø 1.8 mm  
**N22** Ø 2.2 mm  
**N30** Ø 3.0 mm

**Neuro Matchstick Diamond**

**universal cutter**  
Velocity Alpha  
single-use sterile

**ND10** Ø 1.0 mm  
**ND18** Ø 1.8 mm  
**ND22** Ø 2.2 mm  
**ND30** Ø 3.0 mm

**Lindemann****universal cutter**

Velocity Alpha  
single-use sterile

**L16-S** Ø 1.65 x 10 mm  
**L16-M** Ø 1.65 x 20 mm

**Drill****universal cutter**

Velocity Alpha  
single-use sterile

**DR15** Ø 1.5 mm  
**DR20** Ø 2.0 mm

**Pin****universal cutter**

Velocity Alpha  
single-use sterile

**P10** Ø 1.0 mm

**Barrel / Trommel****universal cutter**

Velocity Alpha  
single-use sterile

**BA65** Ø 6.5 mm

**Acorn / Tulpe****universal cutter**

Velocity Alpha  
single-use sterile

**AC64** Ø 6.4 mm

**Metal Cutter****universal cutter**

Velocity Alpha  
single-use sterile

**M30** Ø 3.0 mm

**Diamond Disc****universal cutter**

Velocity Alpha  
single-use sterile

**DD254** Ø 25.4 mm

**Craniotome****straight blade**

Velocity Alpha  
single-use sterile

**CR-S** Ø 1.8 x 12.0 mm short  
**CR-M** Ø 1.8 x 15.0 mm medium  
**CR-L** Ø 1.8 x 22.0 mm long

**Craniotome spiral****spiral blade**

Velocity Alpha  
single-use sterile

**CRS-S** Ø 1.8 x 12.0 mm short  
**CRS-M** Ø 1.8 x 15.0 mm medium  
**CRS-L** Ø 1.8 x 22.0 mm long

**Velocity® Alpha craniotome cutters**

## Meridian Classic™ cranial perforator range



## Unique Benefits

- › Popular design for maximized familiarity
- › Suitable for skull thicknesses as thin as 2 mm
- › Safe release mechanism
- › Suitable for even and uneven bone
- › Universal Hudson fitting
- › Durable cutting efficiency
- › Different housing colors to easily identify the different models
- › Available in three most commonly used sizes

## Produktmerkmale

- › Populäres Design erlaubt gewohnte Arbeitsweise
- › Sicherer Auslösemechanismus
- › Einsetzbar bei ebenen und unebenen Schädelknochen
- › Konstante Schneidleistung
- › Universeller Hudsonschaft
- › Startet auch nach Unterbrechung
- › Verfügbar in drei Standardgrößen
- › Unterschiedliche Gehäusefarben für einfache Identifikation

Single-Use Cranial Perforators  
for use on skulls as thin as 2.0 mm



**Meridian<sup>Classic</sup> Single-Use Perforator**  
**PER C6-9-S** 6 / 9 mm (inner / outer diameter)  
single-use, sterile  
replaces Codman 26-1223



**Meridian<sup>Classic</sup> Single-Use Perforator**  
**PER C8-11-S** 8 / 11 mm (inner / outer diameter)  
single-use, sterile  
replaces Codman 26-1222



**Meridian<sup>Classic</sup> Single-Use Perforator**  
**PER C11-14-S** 11 / 14 mm (inner / outer diameter)  
single-use, sterile  
replaces Codman 26-1221



## Minimally invasive telescoping nosepieces

- > Variable cutter exposure
- > One click coupling
- > Super slim shaft diameter
- > Variable Fräserlänge
- > 1-Klick Kupplung
- > Extra dünner Schaftdurchmesser

### VMN-TS1

**short** attachment straight  
working length 70 mm  
total length 90 mm

### VMN-TS2

**medium** attachment straight  
working length 100 mm  
total length 120 mm

### VMN-TS3

**long** attachment straight  
working length 130 mm  
total length 150 mm

### VMN-TS4

**extra long** attachment straight  
working length 160 mm  
total length 180 mm

### VMN-TA1

**short** attachment curved  
working length 70 mm  
total length 90 mm

### VMN-TA2

**medium** attachment curved  
working length 100 mm  
total length 120 mm

### VMN-TA3

**long** attachment curved  
working length 130 mm  
total length 150 mm

### VMN-C2

**base unit**  
telescoping function  
accepts all minimally invasive attachments

Cutter selection for minimally invasive telescoping nosepieces



#### Neuro Matchstick

Velocity<sup>®</sup> Alpha  
single-use sterile

**9-N15** Ø 1.5 mm fits VMN-TS1 and VMN-TA1

**9-N20** Ø 2.0 mm fits VMN-TS1 and VMN-TA1

**9-N25** Ø 2.5 mm fits VMN-TS1 and VMN-TA1

**12-N15** Ø 1.5 mm fits VMN-TS2 and VMN-TA2

**12-N20** Ø 2.0 mm fits VMN-TS2 and VMN-TA2

**12-N25** Ø 2.5 mm fits VMN-TS2 and VMN-TA2

**15-N25** Ø 2.5 mm fits VMN-TS3 and VMN-TA3

**18-N25** Ø 2.5 mm fits VMN-TS4



#### Neuro Matchstick Diamond

Velocity<sup>®</sup> Alpha  
single-use sterile

**9-ND25** Ø 2.5 mm fits VMN-TS1 and VMN-TA1

**9-ND30** Ø 3.0 mm fits VMN-TS1 and VMN-TA1

**9-ND35** Ø 3.5 mm fits VMN-TS1 and VMN-TA1

**9-ND45** Ø 4.5 mm fits VMN-TS1 and VMN-TA1

**12-ND20** Ø 2.0 mm fits VMN-TS2 and VMN-TA2

**12-ND25** Ø 2.5 mm fits VMN-TS2 and VMN-TA2

**12-ND30** Ø 3.0 mm fits VMN-TS2 and VMN-TA2

**12-ND35** Ø 3.5 mm fits VMN-TS2 and VMN-TA2

**12-ND45** Ø 4.5 mm fits VMN-TS2 and VMN-TA2

**15-ND30** Ø 3.0 mm fits VMN-TS3 and VMN-TA3

**18-ND30** Ø 3.0 mm fits VMN-TS4



#### Balltip / Kugel

Velocity<sup>®</sup> Alpha  
single-use sterile

**12-B20** Ø 2.0 mm fits VMN-TS2 and VMN-TA2

**15-B20** Ø 2.0 mm fits VMN-TS3 and VMN-TA3

**15-B30** Ø 3.0 mm fits VMN-TS3 and VMN-TA3

**15-B40** Ø 4.0 mm fits VMN-TS3 and VMN-TA3



#### Diamond Ball

Velocity<sup>®</sup> Alpha  
single-use sterile

**12-B20D** Ø 2.0 mm fits VMN-TS2 and VMN-TA2

**12-B30D** Ø 3.0 mm fits VMN-TS2 and VMN-TA2



## Velocity<sup>®</sup> Alpha micro saws

Velocity<sup>®</sup> Alpha micro saws offer reliable performance for a wide variety of microsurgical, spinal, CMF and orthopedic procedures. Key features of the Velocity<sup>®</sup> Alpha micro saws are:

- > Minimal vibration
- > High cutting efficiency
- > Clean low pressure cutting
- > Integrated and adjustable irrigation
- > Fully detachable for optimized cleaning
- > Long lifetime
- > Lightweight
- > Slim design
- > Fully compatible with Velocity<sup>®</sup> Alpha highspeed motor and control unit

Velocity<sup>®</sup> Alpha Mikrosägen bieten zuverlässige Performance für Anwendungen in den Bereichen Mikrochirurgie, Wirbelsäulenchirurgie, MKG und Orthopädie.

- > Minimale Vibration
- > Hohe Schneidleistung
- > Saubere Schnitte bei minimalem Druck
- > Integrierte und verstellbare Spülung
- > Komplett zerlegbar
- > Lange Lebensdauer
- > Geringes Gewicht
- > Schmale Bauform
- > Kompatibel mit Velocity<sup>®</sup> Alpha Highspeed Motor und Steuereinheit

### VMN-OS1

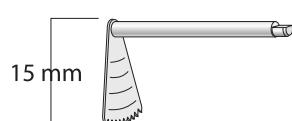
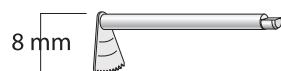
**oscillating** saw attachment  
operating speed 40.000 rpm  
detachable

### VMN-SS1

**sagittal** saw attachment  
operating speed 40.000 rpm  
detachable

### VMN-RS1

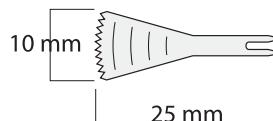
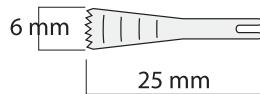
**reciprocating** saw attachment  
operating speed 40.000 rpm  
detachable

Velocity<sup>®</sup> Alpha micro saw blades**Oscillating saw blades****for VMN-OS1 saw attachment**

1:1

1 pc. per package  
single-use  
sterile

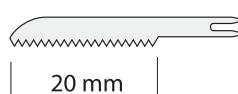
**VMN-O-8-S** 8.0 mm saw blade  
**VMN-O-15-S** 15.0 mm saw blade

**Sagittal saw blades****for VMN-SS1 saw attachment**

1:1

1 pc. per package  
single-use  
sterile

**VMN-S-6-S** 6.0 mm saw blade  
**VMN-S-10-S** 10.0 mm saw blade

**Reciprocating saw blades****for VMN-RS1 saw attachment**

1:1

1 pc. per package  
single-use  
sterile

**VMN-R-15-S** 15.0 mm saw blade  
**VMN-R-20-S** 20.0 mm saw blade  
**VMN-R-30-S** 30.0 mm saw blade

## System Components / Systemkomponenten

**Velocity Alpha  
system components**

<b>Electric control unit Highspeed / Trepan 220V version</b>	VAC220
<b>Electric control unit Highspeed / Trepan 110V version</b>	VAC110
<b>Electric highspeed motor, 80.000 rpm, integrated cable 3.5 m</b>	VAM
<b>Straight nosepiece short working length 22 mm</b>	VMN-XS
<b>Straight nosepiece short working length 40 mm</b>	VMN-S1
<b>Straight nosepiece medium working length 70 mm</b>	VMN-S2
<b>Straight nosepiece long working length 100 mm</b>	VMN-S3
<b>Angled nosepiece short working length 40 mm</b>	VMN-A1
<b>Angled nosepiece medium working length 70 mm</b>	VMN-A2
<b>Angled nosepiece long working length 100 mm</b>	VMN-A3
<b>Angled nosepiece XL working length 130 mm</b>	VMN-A4
<b>Angled nosepiece XXL working length 170 mm</b>	VMN-A5
<b>Angled nosepiece XXXL working length 220 mm</b>	VMN-A6
<b>Irrigation attachment working length 22 mm</b>	VMN-IR-XS
<b>Irrigation attachment working length 40 mm</b>	VMN-IR-1
<b>Irrigation attachment working length 70 mm</b>	VMN-IR-2
<b>Irrigation attachment working length 100 mm</b>	VMN-IR-3
<b>Irrigation attachment working length 130 mm</b>	VMN-IR-4
<b>Irrigation attachment working length 170 mm</b>	VMN-IR-5
<b>Irrigation attachment working length 220 mm</b>	VMN-IR-6
<b>Oscillating saw attachment</b>	VMN-OS-1
<b>Sagittal saw attachment</b>	VMN-SS-1
<b>Reciprocating saw attachment</b>	VMN-RS-1

## System Components / Systemkomponenten

**Velocity Alpha  
system components**

Craniotome base	VMN-C1
Duraguard fixed, short 12 mm	VMCH-1
Duraguard fixed, medium 15 mm	VMCH-2
Duraguard fixed, long 22 mm	VMCH-3
Duraguard rotatable, short 12 mm	VMCH-1R
Duraguard rotatable, medium 15 mm	VMCH-2R
Duraguard rotatable, long 22 mm	VMCH-3R
Craniotome head	VMCH-D
Trepan Hudson adapter, low speed, 1:64 ratio	VMT-102E
Foot control with integrated cable, 3 m	VAFC
Wireless Bluetooth foot control incl. dongle	VAFCBT
Irrigation tube set, 6 pcs. sterile	VMM-ITS-6
Highspeed oil spray, 12 x 500 ml	OS-100
Custom made oil spray nozzle adapter, screw-on profile, reusable	OA-100
Transport & Storage Case suitable for air transport	TSC-VA
Sterilization Tray plastic, customized	PST-200
Sterilization Tray stainless steel, customized	PST-201
Cleaning adapter for 4 nosepieces	CA100
Extra thin attachments	
Base unit for minimally invasive attachments	VMN-C2
Minimally invasive attachment, short, straight, working length 70 mm	VMN-TS1
Minimally invasive attachment, medium, straight, working length 100 mm	VMN-TS2
Minimally invasive attachment, long, straight, working length 130 mm	VMN-TS3

## System Components / Systemkomponenten

Velocity Alpha  
system components

Minimally invasive attachment, extra long, straight, working length 160 mm	VMN-TS4
Minimally invasive attachment, short, curved, working length 70 mm	VMN-TA1
Minimally invasive attachment, medium, curved, working length 100 mm	VMN-TA2
Minimally invasive attachment, long, curved, working length 130 mm	VMN-TA3

## SPARE PARTS

Bar for footswitch	VMME-FS-H
Irrigation stand	VMM-EC-S
Irrigation tube clip set 5 pcs.	VMM-CLIPS



## Technical Data / Technische Daten

Velocity Alpha EU Version 220 V	Velocity Alpha US Version 110 V
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Supply voltage	220 - 240 V	100 - 130 V
Permitted voltage fluctuation	± 10 %	± 10 %
Nominal current	0.3 - 0.8 A	0.3 - 1.6 A
Frequency	50 - 60 Hz	50 - 60 Hz
Mains fuse	2 x 250 V - T 1.6 AH	2 x 250 V - T 1.6 AH
Max. power consumption	170 VA	170 VA
Max. mechanical output power	80 W	80 W
Torque level	2.2 ... 88 Ncm	2.2 ... 88 Ncm
Motor speed range	1.000 - 80.000 rpm	1.000 - 80.000 rpm
Irrigation flow rate	25/50/75/100 ml/min	25/50/75/100 ml/min
Dimensions	262 x 291 x 99 mm	262 x 291 x 99 mm
Wireless standard	Bluetooth™	Bluetooth™
Protection class	II	II
Applied part	Type B	Type B
Integrated irrigation pump	yes	yes
Foot control / danger zone M / ANSI/AAMI	AP / IEC 60601-1	AP / IEC 60601-1
Water resistance of foot control / 1 m depth for 1 h	IPX8 / IEC 60529	IPX8 / IEC 60529
Pollution level	2	2
Overvoltage category	II	II
Max. altitude / above sea level	3.000 m	3.000 m
Batteries used with VAFCBT Bluetooth foot control	Standard AA Mignon	Standard AA Mignon
Compatible with thermo washing machines and autoclavable < 135°C / 383°F (motor parts)	yes	yes
Noise level (motor only) acc. to ISO 11498	< 53 dBA	< 53 dBA



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