



Velocity^{ALPHA} high speed surgical drill system



Velocity^{ALPHA}

HIGH SPEED SURGICAL DRILL SYSTEM

10% more power*

20% smaller*

Reduced thermal warming

*compared to previous Velocity[®] generation

Launching the Velocity 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 and ease of use for their equipment.

Universal cutter system

80.000 rpm

Touch Screen

27 Languages

Low noise level*

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

Velocity^{ALPHA}

The universal cutter system

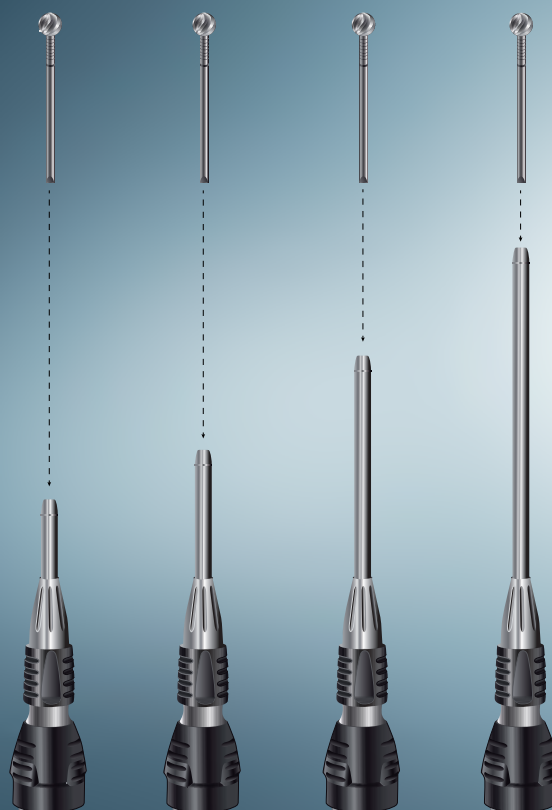
80% less inventory cost / different cutter models

No more cutter identification hassles

Adjustable cutter exposure

Easiest handling

UNIVERSAL
CUTTER



Velocity Alpha universal cutter system

> 80% less cutter codes and inventory cost

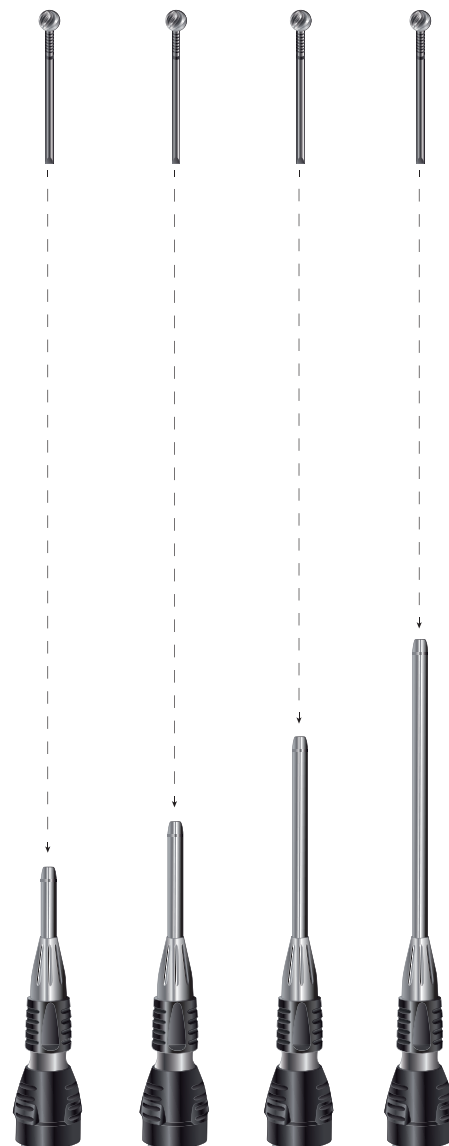
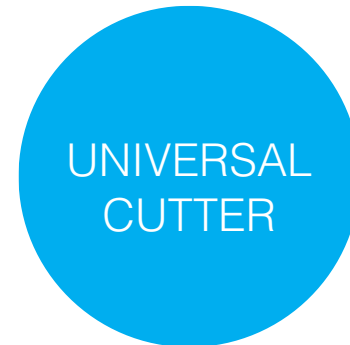
Instead of more than 200 to 300 different cutters and product codes, Velocity Alpha only has 50 codes without compromising variety. This means less stock requirement and free cash-flow for the hospital.

> 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.

> Improved safety

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

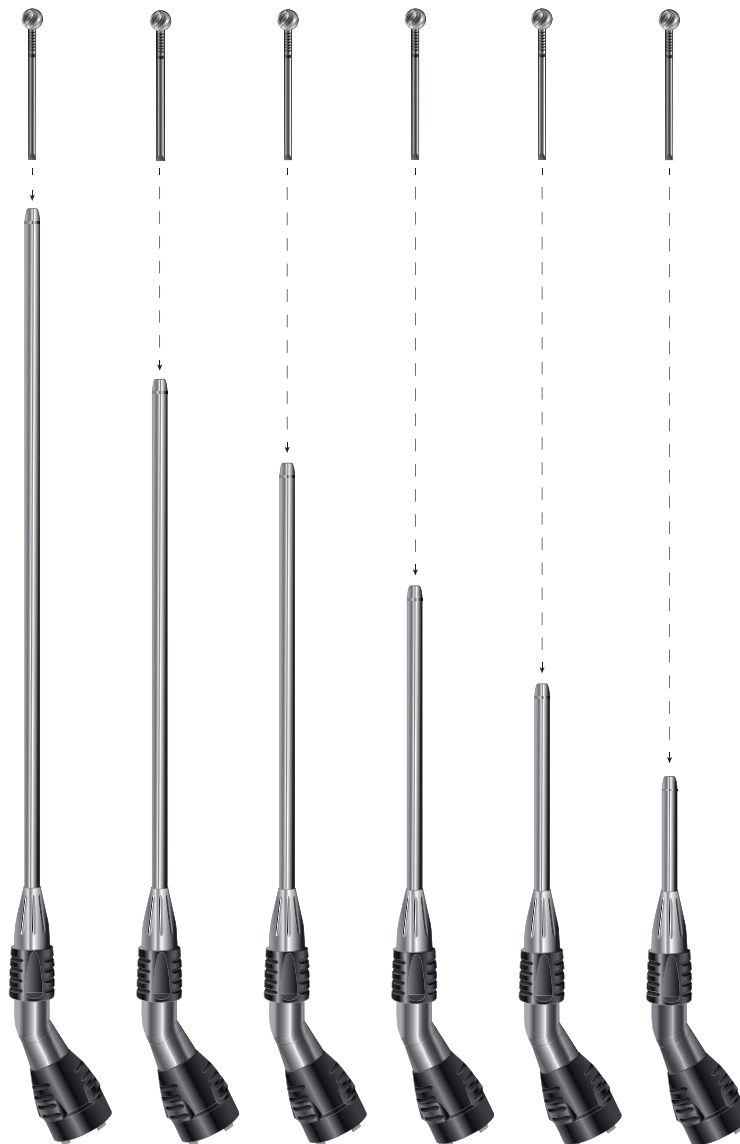




UNIVERSAL CUTTER



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





VARIABLE EXPOSURE



One cutter - 8 exposure positions.
Peerless flexibility.



> 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).

ONE-CLICK COUPLING



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



One click to connect any cutter



One click to connect any attachment



> 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.



Straight nosepieces

Super slim - packed with unique features.

Velocity 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 Alpha nosepieces offer a unique set of features:

- > Universal cutter system
- > Variable cutter exposure
- > One click coupling
- > Super slim shaft diameter (5.4 mm)

VMN-XS

extra short attachment straight (without telescoping)
working length 22 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 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 Alpha nosepieces offer a unique set of features:

- > Universal cutter system
- > Variable cutter exposure
- > One click coupling
- > Super slim shaft diameter (5.4 mm)
- > 25° angulation for enhanced vision

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

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



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).



High speed 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.



VMT-102E

Speed reducer

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

VAM

80.000 rpm high speed motor
with integrated 3.5 m cable
autoclavable < 134°C

Velocity 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 control unit. The Velocity 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 Alpha unit caters for all nationalities and markets.





VAC110

Control unit with integrated irrigation pump



Motor cable safety socket



Illuminated touchscreen



Integrated irrigation pump

FOOT CONTROL

- > Large, easy to find foot print
- > Wide-angle accessibility
- > 3 color-coded program buttons
- > Accelerator or On/Off Mode
- > Safety guard



VAFC

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

Accessories

Custom PPSU sterilization tray

- > secure reprocessing and storage
- > customized inlays for proper fit of all components
- > pictograms for ease of use



Custom stainless steel sterilization tray

- > secure reprocessing and storage
- > customized inlays for proper fit of all components
- > pictograms for ease of use



Velocity Alpha cleaning adapter

- > for internal rinsing of nosepieces
- > simultaneous cleaning of up to 4 nosepieces



PST-200

sterilization tray PPSU plastic

custom made inlays

PST-201

sterilization tray stainless steel

custom made inlays

CA-100

cleaning adapter

for internal nosepiece irrigation

Irrigation tubing 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



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 Alpha System overview

> Straight attachments



> Duraguards and craniotome base



> Angled attachments



> Speed reducer



VMT-102E
1:64 ratio

> Irrigation tubing adapters



See page 15
for details

> High speed motor



VAM
80.000 rpm

> Cleaning adapter



See page 14
for details

> Control unit



VAC110
control unit with irrigation

> Sterilization trays

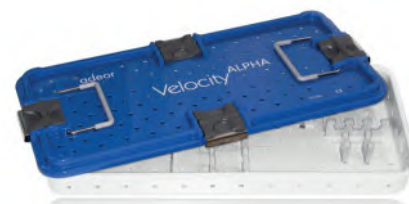


PST-201
stainless steel sterilization tray

> Foot control



VAFC
water resistant



PST-200
PPSU sterilization tray

Velocity Alpha universal cutter range



UNIVERSAL CUTTER



One universal cutter for all Velocity Alpha nosepieces.



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

DR30 Ø 3.0 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

Velocity[®] Alpha craniotome cutters**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

Meridian™ cranial perforator range



CRANIAL PERFORATORS

Unique Benefits

- › Popular design for maximized familiarity
- › Suitable for skull thicknesses as thin as 1 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 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 marktüblichen Standardgrößen
- › Unterschiedliche Gehäusefarben für einfache Identifikation



Meridian^{Classic} Single-Use Perforator
PER C6-9-S 6 / 9 mm (inner / outer diameter)
 single-use, sterile, for skulls as thin as 2 mm
 alternative to Integra® / Codman® 26-1223



Meridian^{Classic} Single-Use Perforator
PER C8-11-S 8 / 11 mm (inner / outer diameter)
 single-use, sterile, for skulls as thin as 2 mm
 alternative to Integra® / Codman® 26-1222



Meridian^{Classic} Single-Use Perforator
PER C11-14-S 11 / 14 mm (inner / outer diameter)
 single-use, sterile, for skulls as thin as 2 mm
 alternative to Integra® / Codman® 26-1221



Meridian^{alpha} Single-Use Perforator
PER 7-11-S 7 / 11 mm (inner / outer diameter)
 single-use, sterile, for skulls as thin as 3 mm
 alternative to AcraCut® 200-243



Meridian^{alpha} Single-Use Perforator
PER 11-14-S 11 / 14 mm (inner / outer diameter)
 single-use, sterile, for skulls as thin as 3 mm
 alternative to AcraCut® 200-241 or 200-271



Meridian^{alpha} Single-Use Perforator
PER 7-11-SP 7 / 11 mm (inner / outer diameter)
 single-use, sterile, for skulls as thin as 1 mm
 alternative to AcraCut® 200-253



Meridian^{alpha} Single-Use Perforator
PER 11-14-SP 11 / 14 mm (inner / outer diameter)
 single-use, sterile, for skulls as thin as 1 mm
 alternative to AcraCut® 200-251



Minimally invasive telescoping nosepieces

- > Variable cutter exposure
- > One click coupling
- > Super slim shaft diameter (4.3 mm)

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 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 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 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 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

15-B30D Ø 3.0 mm fits VMN-TS3 and VMN-TA3

15-B40D Ø 4.0 mm fits VMN-TS3 and VMN-TA3



Velocity Alpha micro saws

Velocity Alpha micro saws offer reliable performance for a wide variety of microsurgical, spinal, CMF and orthopedic procedures. Key features of the Velocity® 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 Alpha highspeed motor and control unit

VMN-OS1

oscillating saw attachment
operating speed 40.000 rpm
detachable

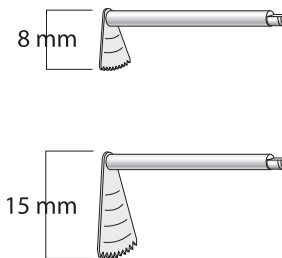
VMN-SS1

sagittal saw attachment
operating speed 40.000 rpm
detachable

VMN-RS1

reciprocating saw attachment
operating speed 40.000 rpm
detachable

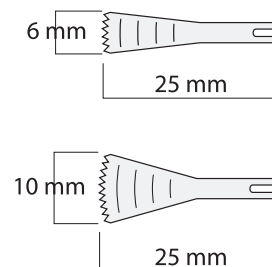
Velocity Alpha micro saw blades

**Oscillating saw blades**

for VMN-OS1 saw attachment
1:1

1 pc. per package
single-use
sterile

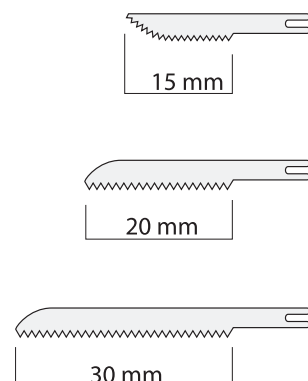
VMN-O-8-S 8.0 mm saw blade
VMN-O-15-S 15.0 mm saw blade

**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

Velocity Alpha
system components

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

System Components

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
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

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

Velocity Alpha
US Version
110 V

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