



## Instrumente für die HNO- und Neurochirurgie *Instruments for E.N.T. and neurosurgery*

### **Rotierende Qualitätsinstrumente für die HNO- und Neurochirurgie**

Qualitätsinstrumente von D+Z sind die gute Voraussetzung für den professionellen Einsatz im HNO- & neurochirurgischen Bereich. Operateure in aller Welt vertrauen darauf.

Das hier vorgestellte Instrumentarium beinhaltet Bohrer, Fräser und Schleifer in bewährten, anwendungsgerechten Verzahnungen, Körnungen, Größen und Schaftarten. Sie wählen zwischen Diamantinstrumenten, Hartmetallinstrumenten und Instrumenten aus rostfreiem Stahl. Je nach Antrieb bieten wir Instrumente für den Bereich High Speed und Low Speed an.

Wir haben allgemein übliche Fertigungsstandards verbessert. Durch die Verwendung der Schleiftechnologie können D+Z Diamant- und Stahlinstrumente aus einem Stück gefertigt werden. Die maximale Präzision garantiert vibrationsarmes Arbeiten und höchste Stabilität. Auch für unsere Hartmetallinstrumente werden nur Edelstahlschäfte und hochwertiges, heiß isostatisch nachverdichtetes Hartmetall (HiP) verwendet.

Die Entwicklung und Konstruktion im eigenen Haus ist für uns die Grundvoraussetzung Instrumente zu fertigen, die höchsten Ansprüchen in Qualität und Handhabung genügen. Unsere Instrumente sind kompatibel zu allen gängigen Antriebssystemen.

Für das gesamte Sortiment finden Sie auf der D+Z Homepage [www.drendel.com](http://www.drendel.com) eine Herstellerinformation zur validierten Aufbereitung.

### **Rotary quality instruments for E.N.T. and neurosurgery**

*D+Z quality instruments are the perfect professional choice for successful operations in ENT and neurosurgery. Surgeons all over the world rely on them.*

*Our product assortment includes burs, cutters and abrasives with high-end blade geometries, specific natural grit, and all commonly used sizes and shank types. You can choose among diamond, tungsten carbide and stainless steel instruments. Our range includes high speed and low speed tools to suit the respective power system.*

*We have exceeded conventional manufacturing standards. Thanks to the use of grinding technology, D+Z diamond and steel instruments can now be offered in a monoblock one piece construction.*

*The meticulous precision of our instruments guarantees low vibration during use and extreme stability. Our tungsten carbide instruments are manufactured to the same high standards; only stainless steel shanks and fine grain HiP (hot isostatic pressed) tungsten carbide are used.*

*To us, the development and construction at our own premises is the basic requirement for producing instruments whose supreme quality and handling meet even the highest expectations. Our instruments are totally compatible with all commonly used power systems and can therefore be combined with them without problems.*

*For information provided by the manufacturer on the validated reprocessing of our entire product range, please visit the D+Z website [www.drendel.com](http://www.drendel.com)*

**Drendel + Zwieling**  
DIAMANT GmbH  
Schürenbreder Weg 27  
32689 Kalletal · Germany

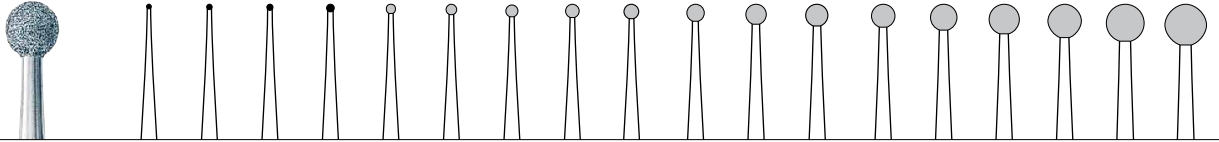
fon: +49 (0)5264 6579280  
fax: +49 (0)5264 6579284  
info@drendel.com  
[www.drendel.com](http://www.drendel.com)





**Low Speed Instrumente - Schaft Ø 2,35**  
*Low speed instruments - Shank Ø 2,35*

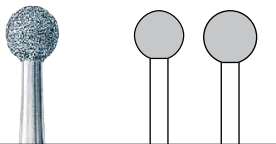
**Diamant rund**  
*Diamond round*



**242**

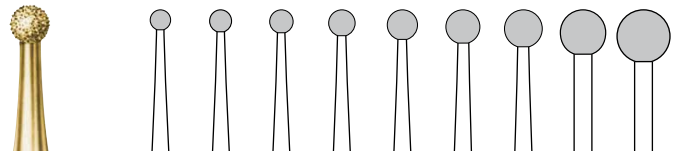
(Ø = mm)	0,6	0,7	0,8	1,0	1,2	1,4	1,6	1,8	2,1	2,3	2,5	2,7	3,1	3,5	4,0	4,5	5,0	6,0
<b>REF</b> 242 Schaft · Shank	Größe · Size																	
70 mm ... 106 ...	006	007	008	010	012	014	016	018	021	023	025	027	031	035	040	045	050	060
95 mm ... 107 ...	006	-	-	010	-	014	-	018	-	023	-	027	031	035	040	045	050	060
125 mm ... 108 ...	006	-	008	010	-	014	-	018	021	023	-	027	031	035	040	045	050	060

**Diamant supergrob rund**  
*Diamond super-coarse round*



**242**

(Ø = mm)	6,5	7,0
<b>REF</b> 242 Schaft · Shank	Größe · Size	
70 mm ... 106 ...	065	070
95 mm ... 107 ...	-	070
125 mm ... 108 ...	-	070

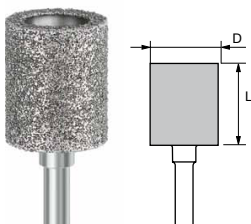


**242 SC**

(Ø = mm)	2,3	2,7	3,1	3,5	4,0	4,5	5,0	6,0	7,0
<b>REF</b> 242 SC Schaft · Shank	Größe · Size								
70 mm ... 106 ...	023	027	031	035	040	045	050	060	070
95 mm ... 107 ...	023	027	031	035	040	045	050	060	070
125 mm ... 108 ...	023	027	031	035	040	045	050	060	070

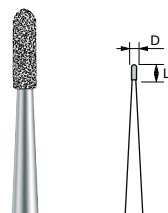
Körnung 427 µm · Grain 427 µm

**Diamant - Walze**  
*Diamond - Barrel*



**829**

L mm	11,0
D (Ø = mm)	9,0
<b>REF</b> 829 Schaft · Shank	Größe · Size
70 mm ... 106 ...	090



**828**

L mm	2,0
D (Ø = mm)	0,6
<b>REF</b> 828 Schaft · Shank	Größe · Size
70 mm ... 106 ...	006

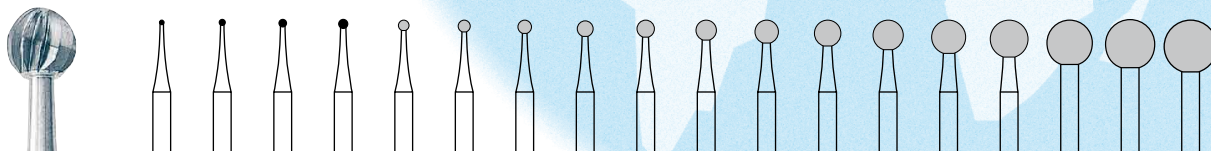
**Alle Instrumente sind unsteril.**  
*All instruments are non-sterile.*

■ = Artikel auf Anfrage · Article on request



**Low Speed Instrumente - Schaft Ø 2,35**  
*Low speed instruments - Shank Ø 2,35*

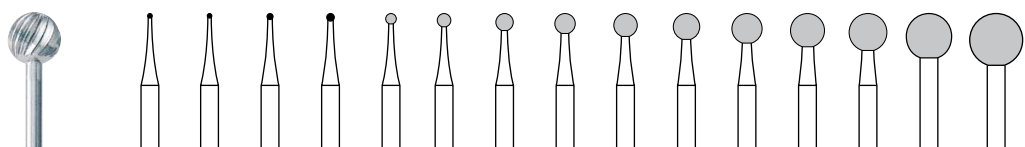
**Hartmetall rund**  
*Tungsten carbide round*



**HM 236**

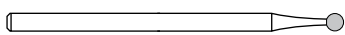
(Ø = mm)	0,5	0,8	1,0	1,2	1,4	1,6	1,8	2,1	2,3	2,7	3,1	3,5	4,0	4,5	5,0	6,0	6,5	7,0
<b>REF</b> <b>HM 236</b> Schaft · Shank	Größe · Size																	
70 mm ... <b>106</b> ...	<b>005</b>	<b>008</b>	<b>010</b>	<b>012</b>	<b>014</b>	<b>016</b>	<b>018</b>	<b>021</b>	-	<b>027</b>	<b>031</b>	<b>035</b>	<b>040</b>	<b>045</b>	<b>050</b>	<b>060</b>	<b>065</b>	<b>070</b>
95 mm ... <b>107</b> ...	<b>005</b>	<b>008</b>	<b>010</b>	-	-	-	<b>018</b>	-	<b>023</b>	-	<b>031</b>	<b>035</b>	<b>040</b>	<b>045</b>	<b>050</b>	<b>060</b>	-	<b>070</b>
125 mm ... <b>108</b> ...	-	-	-	-	-	-	-	-	<b>023</b>	-	<b>031</b>	-	<b>040</b>	-	<b>050</b>	<b>060</b>	-	<b>070</b>

**Rostfreier Stahl rund**  
*Stainless steel round*

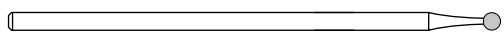


**RF 236**

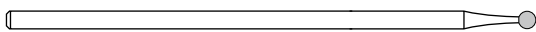
(Ø = mm)	0,6	0,7	0,8	1,0	1,4	1,8	2,3	2,7	3,1	3,5	4,0	4,5	5,0	6,0	7,0
<b>REF</b> <b>RF 236</b> Schaft · Shank	Größe · Size														
70 mm ... <b>106</b> ...	<b>006</b>	<b>007</b>	<b>008</b>	<b>010</b>	<b>014</b>	<b>018</b>	<b>023</b>	<b>027</b>	<b>031</b>	<b>035</b>	<b>040</b>	<b>045</b>	<b>050</b>	<b>060</b>	<b>070</b>
95 mm ... <b>107</b> ...	<b>006</b>	-	<b>008</b>	<b>010</b>	<b>014</b>	<b>018</b>	<b>023</b>	<b>027</b>	<b>031</b>	<b>035</b>	<b>040</b>	<b>045</b>	<b>050</b>	<b>060</b>	<b>070</b>
125 mm ... <b>108</b> ...	<b>006</b>	-	<b>008</b>	<b>010</b>	<b>014</b>	<b>018</b>	<b>023</b>	<b>027</b>	<b>031</b>	<b>035</b>	<b>040</b>	<b>045</b>	<b>050</b>	<b>060</b>	<b>070</b>



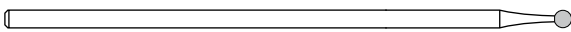
**104** · 44,5 mm Länge · Length



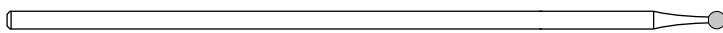
**105** · 65 mm Länge · Length



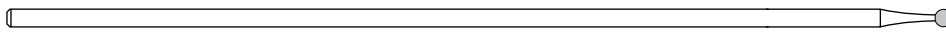
**106** · 70 mm Länge · Length



**036** · 75 mm Länge · Length



**107** · 95 mm Länge · Length



**108** · 125 mm Länge · Length

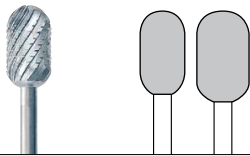
**Alle Instrumente sind unsteril.**  
*All instruments are non-sterile.*

= Artikel auf Anfrage · Article on request



**Low Speed Instrumente - Schaft Ø 2,35**  
*Low speed instruments - Shank Ø 2,35*

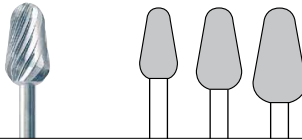
**Rostfreier Stahl Zylinder**  
*Stainless steel cylinder*



**RF 72 E**

(Ø = mm)	6,0	7,0
[REF] <b>RF 72 E</b> Schaft · Shank	Größe · Size	
70 mm ... 106 ...	060	070

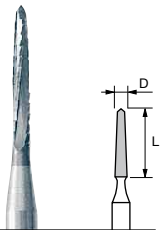
**Rostfreier Stahl Knospe**  
*Stainless steel bud*



**RF 351**

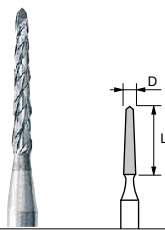
(Ø = mm)	5,0	6,0	7,0
[REF] <b>RF 351</b> Schaft · Shank	Größe · Size		
70 mm ... 106 ...	050	060	070

**Hartmetall - Lindemann**  
*Tungsten carbide - Lindemann*



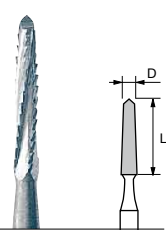
**HM 162**

L mm	9,0
D (Ø = mm)	1,6
[REF] <b>HM 162</b> Schaft · Shank	Größe · Size
65 mm ... 105 ...	016
70 mm ... 106 ...	016



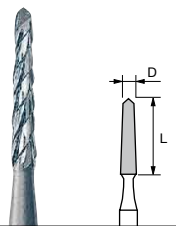
**HM 162A**

L mm	9,0
D (Ø = mm)	1,6
[REF] <b>HM 162A</b> Schaft · Shank	Größe · Size
65 mm ... 105 ...	016
70 mm ... 106 ...	016



**HM 166**

L mm	10,0
D (Ø = mm)	2,1
[REF] <b>HM 166</b> Schaft · Shank	Größe · Size
65 mm ... 105 ...	021
70 mm ... 106 ...	021



**HM 166A**

L mm	10,0
D (Ø = mm)	2,1
[REF] <b>HM 166A</b> Schaft · Shank	Größe · Size
70 mm ... 106 ...	021

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**Low Speed Instrumente - Schaft Ø 2,35**  
*Low speed instruments - Shank Ø 2,35*

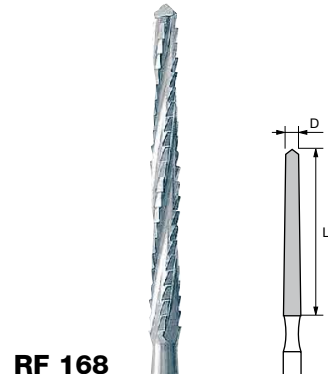
**Rostfreier Stahl - Lindemann**  
*Stainless steel - Lindemann*



**RF 163**

Lmm 5,0  
 D (Ø = mm) 1,4

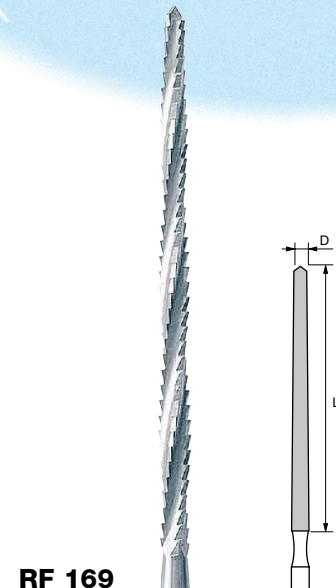
REF	RF 163	Schaft · Shank	Größe · Size
	70 mm	... 106 ...	014



**RF 168**

Lmm 22,0  
 D (Ø = mm) 2,3

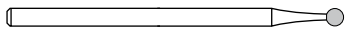
REF	RF 168	Schaft · Shank	Größe · Size
	44,5 mm	... 104 ...	023
	70 mm	... 106 ...	023



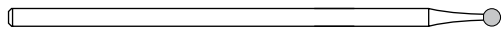
**RF 169**

Lmm 35,0  
 D (Ø = mm) 2,3

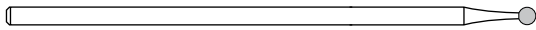
REF	RF 169	Schaft · Shank	Größe · Size
	44,5 mm	... 104 ...	023
	75 mm	... 036 ...	023



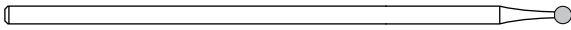
**104 · 44,5 mm Länge · Length**



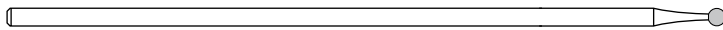
**105 · 65 mm Länge · Length**



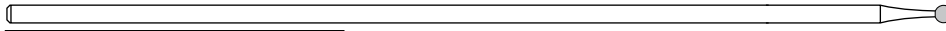
**106 · 70 mm Länge · Length**



**036 · 75 mm Länge · Length**



**107 · 95 mm Länge · Length**



**108 · 125 mm Länge · Length**

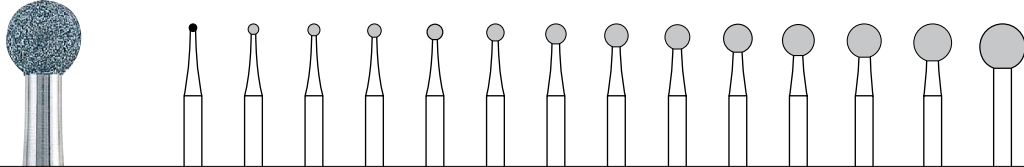
**Alle Instrumente sind unsteril.**  
*All instruments are non-sterile.*

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**HighSpeed Instrumente - Schaft Ø 3,16**  
**HighSpeed instruments - Shank Ø 3,16**

**Diamant rund**  
**Diamond round**

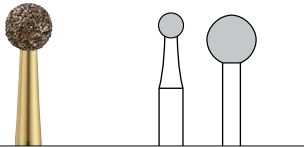


**HS242**

(Ø = mm)

REF	HS 242	Schaft · Shank	Größe · Size														
	70 mm ... 511 ...		010	-	015	-	021	-	-	-	033	-	-	046	-	060	▲
	90 mm ... 512 ...		010	-	015	-	021	-	-	-	033	038	-	046	-	060	I
	110 mm ... 513 ...		010	-	015	-	021	-	-	-	033	-	-	046	-	060	II
	152 mm ... 514 ...		-	-	-	-	021	-	-	-	033	-	-	046	-	060	III
	76 – 80 mm ... 526 ...		010	014	-	018	-	023	027	031	-	-	040	-	050	060	I
	106 – 110 mm ... 525 ...		010	014	-	018	-	023	027	031	-	-	040	-	050	060	II
	136 – 140 mm ... 527 ...		-	-	-	018	-	023	027	031	-	-	040	-	050	060	III

**Diamant rund supergrob**  
**Diamond round super-coarse**

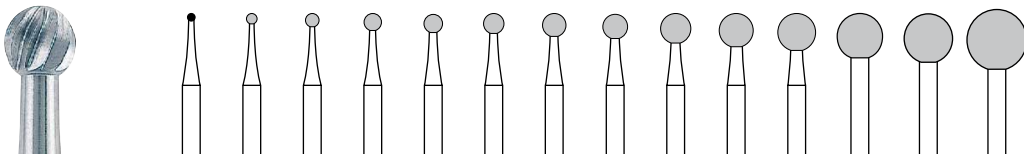


**HS242 SC**

(Ø = mm)

REF	HS242 SC	Schaft · Shank	Größe · Size		
	76 – 80 mm ... 526 ...		040	060	I
	106 – 110 mm ... 525 ...		040	060	II
	136 – 140 mm ... 527 ...		040	060	III

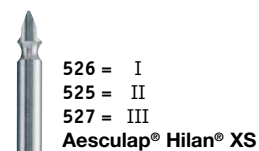
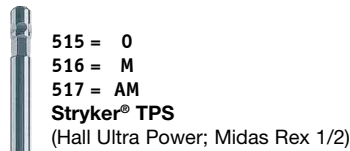
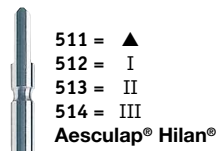
**Rostfreier Stahl rund**  
**Stainless steel round**



**HSS236**

(Ø = mm)  
 # Schneiden/Blades

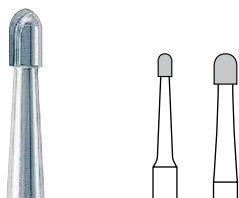
REF	HSS 236	Schaft · Shank	Größe · Size														
	70 mm ... 511 ...		010	014	-	-	024	-	-	032	-	048	-	-	064	079	▲
	90 mm ... 512 ...		010	014	-	-	024	-	-	032	-	048	-	-	064	079	I
	110 mm ... 513 ...		010	014	-	-	024	-	-	032	-	048	-	-	064	079	II
	152 mm ... 514 ...		-	-	-	-	024	-	-	032	-	048	-	-	064	079	III
	76 – 80 mm ... 526 ...		010	014	018	023	-	027	031	-	040	-	050	060	-	-	I
	106 – 110 mm ... 525 ...		010	014	018	023	-	027	031	-	040	-	050	060	-	-	II
	136 – 140 mm ... 527 ...		-	-	018	023	-	027	031	-	040	-	050	060	-	-	III





## HighSpeed Instrumente - Schaft Ø 3,16 HighSpeed instruments - Shank Ø 3,16

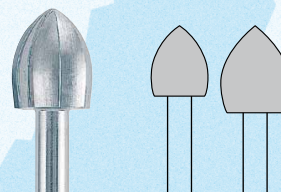
### Rostfreier Stahl Olivenfräser Stainless steel olivecutter



#### HSS04

(Ø = mm)		1,8	3,0	
[REF]	<b>HSS04</b>	Schaft · Shank	Größe · Size	
90 – 92 mm	... 512 ...	018	030	I
110 – 112 mm	... 513 ...	018	030	II
154 mm	... 514 ...	-	030	III
84 – 86 mm	... 516 ...	018	030	M
137 – 139 mm	... 517 ...	018	030	AM

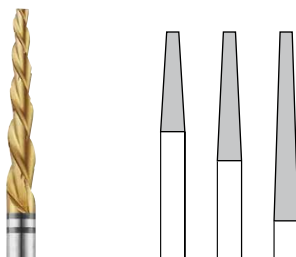
### Rostfreier Stahl Knospe Stainless steel bud



#### HSS237 AC

(Ø = mm)		7,5	9,0	
[REF]	<b>HSS237 AC</b>	Schaft · Shank	Größe · Size	
70 mm	... 511 ...	075	090	▲
90 mm	... 512 ...	075	090	I
110 mm	... 513 ...	075	090	II
73 – 75 mm	... 515 ...	075	090	O
90 – 92 mm	... 516 ...	075	090	M

### Rostfreier Stahl Craniotome Stainless steel Craniotomes



#### HSST21C

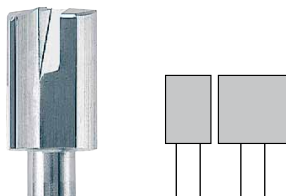
(Ø = mm)		1,2	1,4	1,4	
# Schneiden/Blades		3	3	3	
(Kopflänge/Headlength = mm)		11,0	16,2	20,6	
[REF]	<b>HSST 21C</b>	Schaft · Shank	Größe · Size		
46,4 mm	... 526 ...	012	-	-	I
51,4 mm	... 525 ...	-	014	-	II
56,4 mm	... 527 ...	-	-	014	III

#### HSS21C

(Ø = mm)		1,6	1,6	1,6	
# Schneiden/Blades		3	3	3	
(Kopflänge/Headlength = mm)		13,0	20,5	25,0	
[REF]	<b>HSS 21C</b>	Schaft · Shank	Größe · Size		
63 mm*	... 512 ...	016	-	-	I
67 mm*	... 513 ...	-	016	-	II
77 mm*	... 514 ...	-	-	016	III

\* = für Aesculap-Duraschutz/for Aesculap Duraguard GB536R, GB537R, GB538R

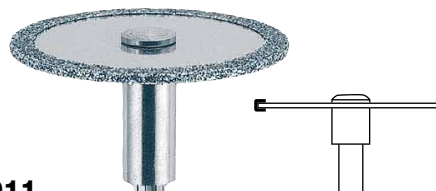
### Rostfreier Stahl Walze Stainless steel Circular



#### HSS24

(Ø = mm)		6,0	9,1	
[REF]	<b>HSS24</b>	Schaft · Shank	Größe · Size	
70 mm	... 511 ...	060	091	▲
90 mm	... 512 ...	060	091	II
110 mm	... 513 ...	-	091	III
72 mm	... 515 ...	060	-	O
89 mm	... 516 ...	060	-	M
142 mm	... 517 ...	060	-	AM

### Diamantscheibe Diamond disc



#### HS911

(Ø = mm)		25,5	
[REF]	<b>HS911</b>	Schaft · Shank	Größe · Size
94 mm	... 512 ...	255	I
113 mm	... 513 ...	255	II
88 mm	... 516 ...	255	M
141 mm	... 517 ...	255	AM

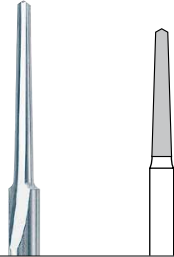
■ = Artikel auf Anfrage · Article on request

**Alle Instrumente sind unsteril.**  
High Speed Instrumente können auf Wunsch steril geliefert werden.  
All instruments are non-sterile.  
High Speed instruments can be delivered in sterile condition on request.



## HighSpeed Instrumente - Schaft Ø 3,16 HighSpeed instruments - Shank Ø 3,16

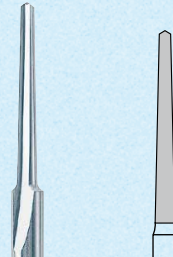
### Rostfreier Stahl Lindemann Stainless steel Lindemann



#### HSS 164

(Ø = mm) 1,6

REF	HSS 164	Schaft · Shank	Größe · Size
	80 – 87 mm ...	511 ...	016 ▲
	100 – 107 mm ...	512 ...	016 I
	120 – 127 mm ...	513 ...	016 II
	77 – 84 mm ...	515 ...	016 0
	94 – 101 mm ...	516 ...	016 M

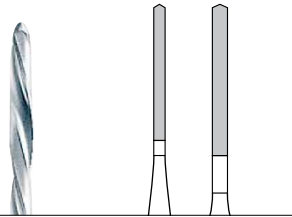


#### HSS 165

(Ø = mm) 1,5

REF	HSS 165	Schaft · Shank	Größe · Size
	80 – 87 mm ...	511 ...	015 ▲
	100 – 107 mm ...	512 ...	015 I
	120 – 127 mm ...	513 ...	015 II
	77 – 84 mm ...	515 ...	015 0

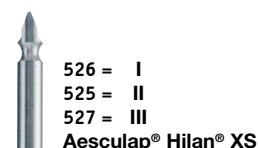
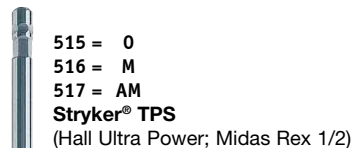
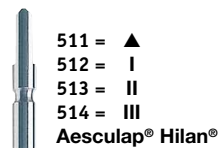
### Rostfreier Stahl Spiralbohrer Stainless steel twist drill



#### HSS 27

(Ø = mm) 1,5 2,0

REF	HSS 27	Schaft · Shank	Größe · Size
	88 – 86 mm ...	511 ...	015 020 ▲
	103 – 106 mm ...	512 ...	015 020 I
	123 – 126 mm ...	513 ...	015 020 II
	80 – 83 mm ...	515 ...	015 020 0
	97 – 100 mm ...	516 ...	015 020 M
	150 – 153 mm ...	517 ...	015 - AM
	122,7 mm ...	526 ...	015 - I
	92,7 mm ...	525 ...	015 - II



**Alle Instrumente sind unsteril.**  
**High Speed Instrumente können auf Wunsch steril geliefert werden.**  
*All instruments are non-sterile.*  
*High Speed instruments can be delivered in sterile condition on request.*

■ = Artikel auf Anfrage · Article on request

**Drendel + Zweiling**  
DIAMANT GmbH  
Schürenbreder Weg 27  
32689 Kalletal · Germany

fon: +49 (0)5264 6579280  
fax: +49 (0)5264 6579284  
info@drendel.com  
www.drendel.com