

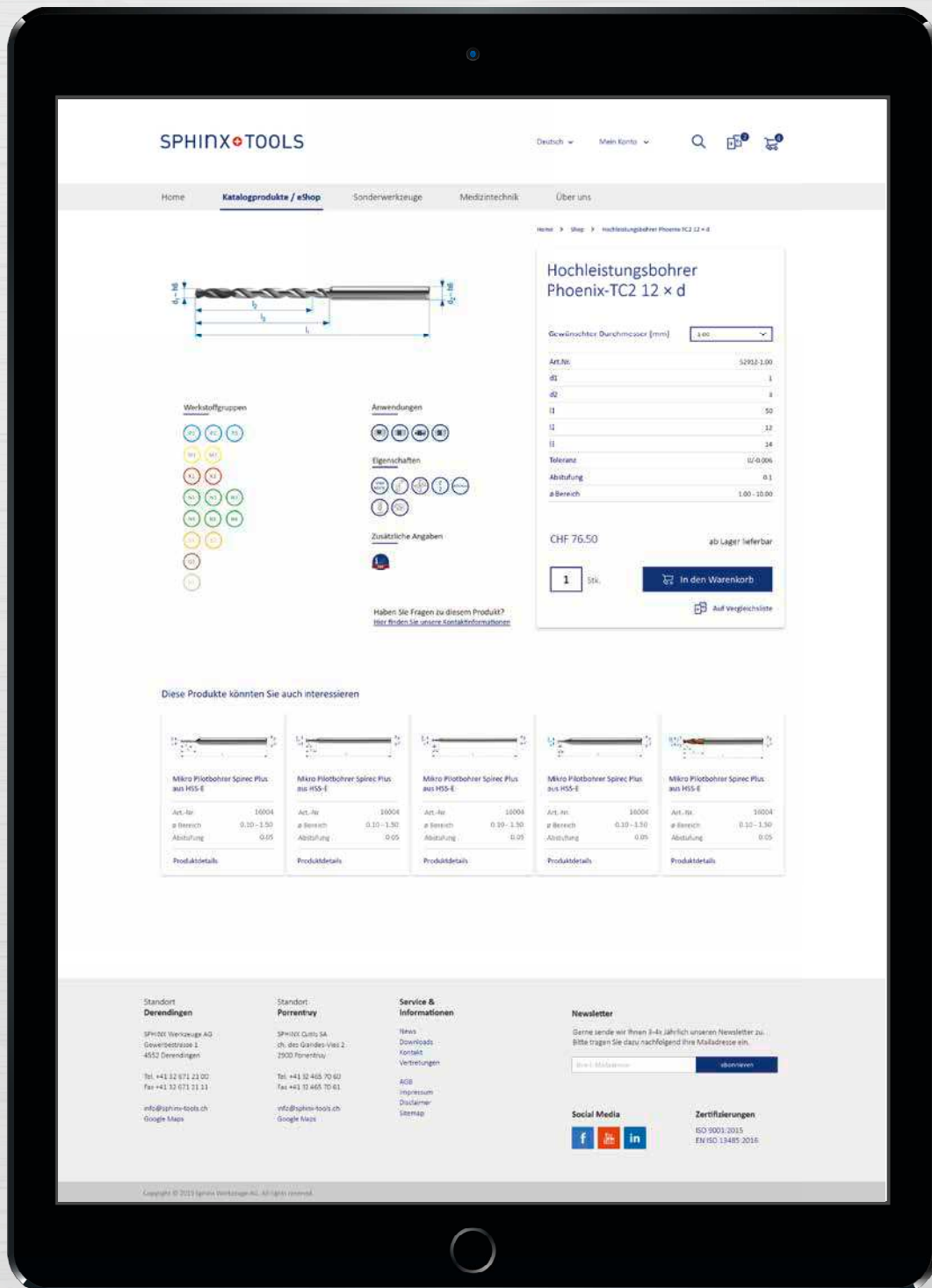
SPHINX⁺TOOLS

**innovation
for quality.**



sphinx-tools.ch

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Die Sphinx Werkzeuge AG ist ein führendes Unternehmen für die Herstellung und den Vertrieb von Präzisionswerkzeugen für die zerspanende Fertigung.

Kontinuierliches Wachstum, konsequente Reinvestitionen in die Produktionsanlagen sowie das persönliche Engagement der Mitarbeiter ergeben die weltweit starke Position. Die Kundenbedürfnisse sehen wir als Leitfaden aller Innovationen. Deshalb vertrauen renommierte Firmen aus Industrie und Medizintechnik auf unsere Qualität und Erfahrung.

Durch Kundennähe und fundiertes Wissen lösen wir komplexe Aufgabenstellungen, bieten oft einzigartige Lösungen und leisten damit einen wesentlichen Beitrag zum Markterfolg namhafter Unternehmen. Auch in Zukunft wird der stetig anspruchsvoller werdende Markt unsere tägliche Herausforderung sein!

Sphinx Outils SA est une entreprise leader dans la fabrication et la vente d'outils de précision pour la production avec enlèvement de copeaux.

Une croissance continue, des investissements réguliers pour les installations de production ainsi que l'engagement de collaborateurs qualifiés ont permis à l'entreprise de se forger une excellente réputation sur le marché mondial. Les besoins de notre clientèle sont pour nous une source permanente d'innovation. C'est la raison pour laquelle des sociétés renommées de l'industrie et de la technique médicale font confiance à notre qualité et à notre expérience.

Grâce à notre proximité avec la clientèle et à notre savoir-faire, nous résolvons des tâches complexes, offrons des solutions souvent uniques et contribuons ainsi largement au succès de nombreuses entreprises de renom. Les exigences croissantes du marché sont notre défi quotidien!

Sphinx ist der **richtige Partner.**

Sphinx est le **partenaire idéal.**

Sphinx è il **partner ideale.**

Sphinx is the **right partner.**



La Sphinx Utensili SpA è un'azienda leader nella fabbricazione e vendita di utensili di precisione per la lavorazione a taglio.

Una crescita continua, conseguenti reinvestizioni nell'impianto di produzione come l'impegno personale dei collaboratori ci permette di avere una forte posizione sul mercato mondiale. I bisogni della clientela sono per noi fonte d'innovazione. E per questo motivo che società rinomate dell'industria e della tecnica medica confidano nella nostra qualità e nella nostra esperienza.

Grazie alla nostra vicinanza alla clientela e il nostro fondato know-how, siamo in grado di risolvere richieste complesse, offrendo delle soluzioni spesso uniche e contribuendo al successo del mercato delle aziende più rinomate. Anche nel futuro le costanti esigenze del mercato saranno la nostra sfida quotidiana.

Sphinx Tools Ltd. is a leading company for the production and sale of precision machining tools.

Its strong international position today is a result of continuous growth, consistent reinvestment in the production plants and the personal dedication of the employees. We view customer needs as the motivation of all our innovations. That is why renowned industrial and medical companies rely on our quality and experience.

Our closeness to customers and solid knowledge allows us to solve complex tasks and offer what are often unique solutions. In doing so, we contribute substantially to the market success of well-known companies. The market is becoming ever more demanding. Meeting those demands is our daily challenge today and in the future.





Bohren und Reiben
Perçage et alésage
Forare ed alesare
Drilling and reaming

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Fräsen
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Milling

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Anwendungstechnik
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Applicazione della tecnologia
Application technology

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Bohren und Reiben
Perçage et alésage
Forare ed alesare
Drilling and reaming






	Artikel Article	Durchmesserbereich Diameter range	Abstufung Incre- ments	Bohrtiefe Cutting length	Spitzen- winkel Point angle	Spiral- winkel Helix angle
NC-Anbohrer Foret à pointer NC						
	50806	0.50–6.00	0.10		60°	20°
	50809	0.50–3.00	0.10		90°	20°
	50808	0.50–3.00	0.10		90°	20°
	50810	2.00–20.00	1.00		90°	20°
	50811	2.00–12.00	1.00		90°	20°
	50812	2.00–20.00	1.00		123°	20°
	50813	2.00–10.00	1.00		123°	20°
	50814	2.00–20.00	1.00		142°	20°
	50815	2.00–10.00	1.00		142°	20°
	50818	1.60–12.00	0.20		142°/90°	20°
Pilotbohrer Foret de préperçage						
	56005	0.10–1.50	0.01	2–4× \varnothing	130°	20°
	56033	0.03–2.99	0.01	2× \varnothing	130°	30°
	56036	0.30–6.00	0.05	2× \varnothing	140°/90°	30°
	16004	0.10–1.50	0.05	2–3× \varnothing	130°	20°
Mikrobohrer Micro foret						
	50695	0.20–1.50	0.01	6× \varnothing	118°	30°
	50699	0.05–2.00	0.01	6× \varnothing	118°	30°

* S. 142+143
p. 142+143





- ✓ hervorragend/excellent/ottimamente/outstanding
- geeignet/approprié/adatto/suitable

Material	Werkstoffgruppe* Workpiece material*							Anwendung* Application*		Seite Page	
	P	M	K	N	S	H	O				
Punta a centrare NC NC spotting drill											
VHM/MD/SC	✓	✓	✓	✓	•		✓			12	
VHM/MD/SC	✓	✓	✓	✓	•		✓			13	
VHM/MD/SC; TiAlSiN	✓	✓	✓	✓	✓	✓	✓			14	
VHM/MD/SC	✓	✓	✓	✓	•		✓			15	
VHM/MD/SC; TiAlSiN	✓	✓	✓	✓	•	✓	✓			16	
VHM/MD/SC	✓	✓	✓	✓	•		✓			17	
VHM/MD/SC; TiAlSiN	✓	✓	✓	✓	•	✓	✓			18	
VHM/MD/SC	✓	✓	✓	✓	•		✓			19	
VHM/MD/SC; TiAlSiN	✓	✓	✓	✓	•	✓	✓			20	
VHM/MD/SC	✓	✓	✓	✓	•		✓			21	
Punta per preforo Pilot drill											
VHM/MD/SC	✓	•	✓	✓	✓		✓				22
VHM/MD/SC	✓	✓	✓	✓	✓		✓				23
VHM/MD/SC; AlCrN	✓	✓	✓	✓	✓	•	•				25
HSS-E	✓	•	✓	•			•				26
Micro punta Micro drill											
VHM/MD/SC	✓	•	✓	✓			•				27
VHM/MD/SC	✓	•	✓	✓			•				28




	Artikel Article	Durchmesserbereich Diameter range	Abstufung Incre- ments	Bohrtiefe Cutting length	Spitzen- winkel Point angle	Spiral- winkel Helix angle
	51200	0.03–3.00	0.01	6 × \varnothing	130°	35°
	51201	0.20–3.00	0.01	6 × \varnothing	130°	35°
	50621	0.15–3.00	0.01	12 × \varnothing	130°	25°
	50622	0.20–3.00	0.01	12 × \varnothing	130°	25°
	12604	0.05–3.175	0.01	DIN 1899-A	118°	25°








Mikro-Tieflochbohrer Micro foret de perçage profond

	50720	0.20–2.00	0.05	20 × \varnothing	129°	30°
	50740	0.40–1.50	0.05	40 × \varnothing	126°	30°
	50760	0.40–1.50	0.05	60 × \varnothing	126°	30°
	50780	0.40–1.50	0.05	80 × \varnothing	126°	30°

Hochleistungsbohrer Nirox Foret à grand rendement Nirox
























































	51609	0.30–3.00	0.05	9 × \varnothing	140°	28°
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Hochleistungsbohrer Phoenix TC2 Foret à grand rendement Phoenix TC2

	52903	1.00–10.00	0.05	3 × \varnothing	140°	30°
	52906	1.00–10.00	0.05	6 × \varnothing	140°	30°
	52909	1.00–10.00	0.10	9 × \varnothing	140°	30°
	52912	1.00–10.00	0.10	12 × \varnothing	137°	30°
	52916	1.00–10.00	0.10	16 × \varnothing	137°	30°
	52920	3.00–10.00	1.00	20 × \varnothing	137°	30°
	52930	3.00–10.00	1.00	30 × \varnothing	137°	30°

* S. 142+143
p. 142+143


- ✓ hervorragend/excellent/ottimamente/outstanding
- geeignet/approprié/adatto/suitable

Material	Werkstoffgruppe* Workpiece material*							Anwendung* Application*	Seite Page
	P	M	K	N	S	H	O		
VHM/MD/SC	✓	✓	✓	✓	✓		•	 	30
VHM/MD/SC; TiAlN	✓	✓	✓	✓	✓		•	  	32
VHM/MD/SC	✓	•	✓	✓			•	 	34
VHM/MD/SC; TiAlN	✓	•	✓	✓	•	•	•	  	36
HSS-E	✓	•	✓	•			•	 	38
Micro punta per foro profondo Micro deep hole drill									
VHM/MD/SC; Mi-Nova	✓	•	✓	✓	•	•	✓	  	39
VHM/MD/SC; Mi-Nova	✓	•	✓	✓	•	•	✓	  	40
VHM/MD/SC; Mi-Nova	✓	•	✓	✓	•	•	✓	  	41
VHM/MD/SC; Mi-Nova	✓	•	✓	✓	•	•	✓	  	42
Punta ad alto rendimento Nirox High performance drill Nirox									
VHM/MD/SC; TiAlSiN	✓	✓	•	•	✓	•	✓	   	43
Punta ad alto rendimento Phoenix TC2 High performance drill Phoenix TC2									
VHM/MD/SC; AlTiCrN+S	✓	✓	✓	✓	✓	•	•	    	44
VHM/MD/SC; AlTiCrN+S	✓	✓	✓	✓	✓	•	•	    	45
VHM/MD/SC; AlTiCrN+S	✓	✓	✓	✓	✓	•	•	   	46
VHM/MD/SC; AlCrTiN	✓	✓	✓	✓	✓	•	•	   	47
VHM/MD/SC; AlCrTiN	✓	✓	•	✓	✓	•	•	  	48
VHM/MD/SC; AlCrTiN	•	✓	•	✓	✓	•	•	  	49
VHM/MD/SC; AlCrTiN	•	✓	•	✓	✓	•	•	  	50



	Artikel Article	Durchmesserbereich Diameter range	Abstufung Incre- ments	Bohrtiefe Cutting length	Spitzen- winkel Point angle	Spiral- winkel Helix angle
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Hochleistungsbohrer Phoenix Foret à grand rendement Phoenix

	50938	1.00–12.70	0.10	3 × ϕ	140°	30°
	50940	1.00–12.70	0.05	6 × ϕ	140°	30°
	50941	0.50–3.00	0.10	6 × ϕ	140°	30°





Hochleistungsbohrer Quadro Foret à grand rendement Quadro

	52100	3.00–19.50	0.50	6 × ϕ	140°	0°
	52200	3.00–20.00	0.50	12 × ϕ	140°	0°
	52150	4.00–20.00	0.50	6 × ϕ	140°	15°


Spiralbohrer Foret hélicoïdal

	50950	3.00–20.00	0.10	DIN 6537	140°	30°
	50830	0.30–20.00	0.10	DIN 6539	118°	35°
	50838	0.30–6.00	0.05	3–8 × ϕ	118°	30°
	50820	0.70–14.00	0.10	DIN 338	130°	35°–15°

Bohrreibahlen Foret alésoir

	50840	2.00–14.00	0.10	DIN 6539	118°	35°
	55654	1.00–14.00	0.10	DIN 6539	140°	35°
	55338	1.00–14.00	0.10	DIN 338	140°	35°
	55652	0.20–2.99	0.01	5 × ϕ	140°	35°

Reibahlen Alésoir

	58000	0.987–6.018	0.01	–8 × ϕ		10°
	58500	0.987–6.018	0.01	–8 × ϕ		10°

* S. 142+143
p. 142+143

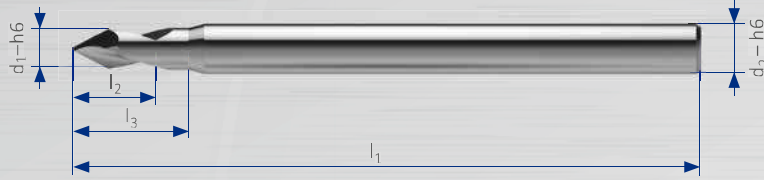
- ✓ hervorragend/excellent/ottimamente/outstanding
- geeignet/approprié/adatto/suitable

Material	Werkstoffgruppe* Workpiece material*							Anwendung* Application*	Seite Page
	P	M	K	N	S	H	O		
Punta ad alto rendimento Phoenix High performance drill Phoenix									
VHM/MD/SC; AlCrN	✓	✓	✓	•	•	•			51
VHM/MD/SC; TiAlN	✓	✓	✓	•	•	•			52
VHM/MD/SC; TiAlN	✓	✓	✓	•	•	•			54
Punta ad alto rendimento Quadro High performance drill Quadro									
VHM/MD/SC			✓	✓			•		55
VHM/MD/SC			✓	✓			•		56
VHM/MD/SC; TiAlN	✓		✓	✓			•		57
Punta elicoidale Twist drill									
VHM/MD/SC; TiAlN	✓	•	✓	•	•	•	•		58
VHM/MD/SC	✓	✓	•	✓	•		✓		59
VHM/MD/SC	✓	✓	•	✓	•		✓		60
VHM/MD/SC	✓		✓	•					61
Punta alesatore Drill reamer									
VHM/MD/SC	•	•	•	✓	•				62
VHM/MD/SC	✓	•	✓	•	•				63
VHM/MD/SC	✓	•	✓	•	•				64
VHM/MD/SC	✓	•	✓	•	•		•		65
Alesatore Reamer									
VHM/MD/SC	✓	✓	✓	✓	•				67
VHM/MD/SC	✓	✓	✓	✓	•				68

NC-Anbohrer
Foret à pointer NC
Punta a centrare NC
NC spotting drill

Art. 50806

- P1-3
- M1,2
- K1,2
- N1-8
- S1
- O1



- VHM MD/SC
- Z 2
- 60°
- 20°
- Flute profile icon

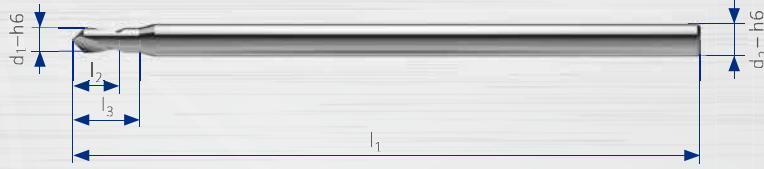


d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
0.50	1.50	2.00	38	3.00
0.60	1.50	2.00	38	3.00
0.70	1.50	2.00	38	3.00
0.80	2.00	2.50	38	3.00
0.90	2.00	2.50	38	3.00
1.00	2.00	2.50	38	3.00
1.10	2.50	3.50	38	3.00
1.20	2.50	3.50	38	3.00
1.30	2.50	3.50	38	3.00
1.40	3.00	4.00	38	3.00
1.50	3.00	4.00	38	3.00
1.60	3.00	4.00	38	3.00
1.70	4.00	5.00	38	3.00
1.80	4.00	5.00	38	3.00
1.90	4.00	5.00	38	3.00
2.00	5.00	6.00	38	3.00
2.10	5.00	6.00	38	3.00
2.20	5.00	6.00	38	3.00
2.30	6.00	7.00	38	3.00
2.40	6.00	7.00	38	3.00
2.50	6.00	7.00	38	3.00
2.60	7.00	8.00	38	3.00
2.70	7.00	8.00	38	3.00
2.80	7.00	8.00	38	3.00
2.90	7.00	8.00	38	3.00
3.00	9.50	9.50	38	3.00
4.00	10.50	10.50	40	4.00
5.00	16.00	16.00	50	5.00
6.00	16.00	16.00	50	6.00

NC-Anbohrer
Foret à pointer NC
Punta a centrare NC
NC spotting drill

Art. 50809

- P1-3
- M1,2
- K1,2
- N1-8
- S1
- O1



- VHM
MD/SC
- Z
2
-
-
-

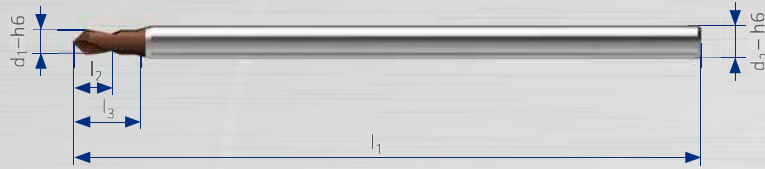





d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
0.50	1.00	1.60	38	2.00
0.60	1.20	1.80	38	2.00
0.70	1.40	2.00	38	2.00
0.80	1.60	2.20	38	2.00
0.90	1.80	2.40	38	2.00
1.00	2.00	2.60	38	2.00
1.10	2.20	2.80	38	2.00
1.20	2.40	3.00	38	2.00
1.30	2.60	3.20	38	2.00
1.40	2.80	3.40	38	2.00
1.50	3.00	3.80	38	2.00
1.60	3.20	4.20	38	2.00
1.70	3.40	4.40	38	2.00
1.80	3.60	4.60	38	2.00
1.90	3.80	4.80	38	2.00
2.00	5.00	6.00	38	3.00
2.50	6.50	8.00	38	3.00
3.00	7.50	7.50	38	3.00

NC-Anbohrer
Foret à pointer NC
Punta a centrare NC
NC spotting drill

Art. 50808

- P1-3 M1,2
- K1,2 N1-8
- S1 H1
- O1,2
-  



- VHM
MD/SC TIAISIN
- Z
2 
-  

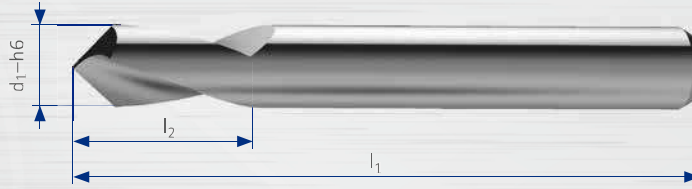


d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
0.50	1.00	1.60	38	2.00
0.60	1.20	1.80	38	2.00
0.70	1.40	2.00	38	2.00
0.80	1.60	2.20	38	2.00
0.90	1.80	2.40	38	2.00
1.00	2.00	2.60	38	2.00
1.10	2.20	2.80	38	2.00
1.20	2.40	3.00	38	2.00
1.30	2.60	3.20	38	2.00
1.40	2.80	3.40	38	2.00
1.50	3.00	3.80	38	2.00
1.60	3.20	4.20	38	2.00
1.70	3.40	4.40	38	2.00
1.80	3.60	4.60	38	2.00
1.90	3.80	4.80	38	2.00
2.00	5.00	6.00	38	3.00
2.50	6.50	8.00	38	3.00
3.00	7.50	7.50	38	3.00

NC-Anbohrer
Foret à pointer NC
Punta a centrare NC
NC spotting drill

Art. 50810

- P1-3
- M1,2
- K1,2
- N1-8
- O1



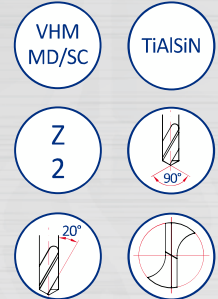
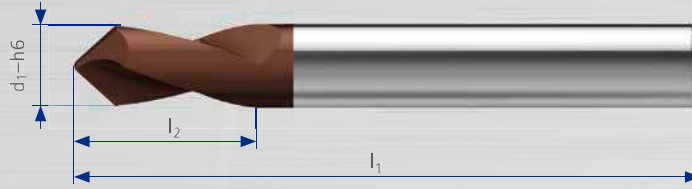
- VHM
MD/SC
- Z
2
-
-
-



d_1 mm	l_2 mm	l_1 mm
2.00	8.50	25
3.00	9.50	32
4.00	10.50	40
5.00	16.00	50
6.00	16.00	50
8.00	20.00	60
10.00	22.00	70
12.00	22.00	70
14.00	25.00	75
16.00	25.00	75
20.00	35.00	75

NC-Anbohrer
Foret à pointer NC
Punta a centrare NC
NC spotting drill

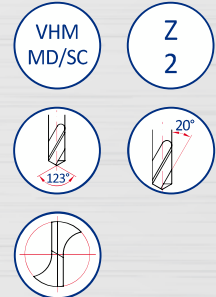
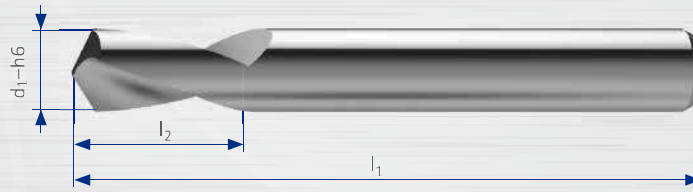
Art. 50811



d ₁	l ₂	l ₁
mm	mm	mm
2.00	8.50	25
3.00	9.50	32
4.00	10.50	40
5.00	16.00	50
6.00	16.00	50
8.00	20.00	60
10.00	22.00	70
12.00	22.00	70

NC-Anbohrer
Foret à pointer NC
Punta a centrare NC
NC spotting drill

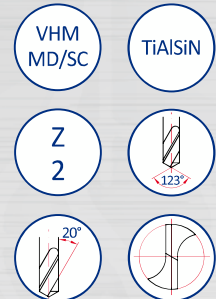
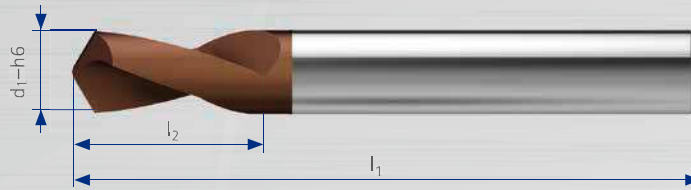
Art. 50812



d_1 mm	l_2 mm	l_1 mm
2.00	8.50	25
3.00	9.50	32
4.00	10.50	40
5.00	16.00	50
6.00	16.00	50
8.00	20.00	60
10.00	22.00	70
12.00	22.00	70
14.00	25.00	75
16.00	25.00	75
20.00	35.00	75

NC-Anbohrer
 Foret à pointer NC
 Punta a centrare NC
 NC spotting drill

Art. 50813

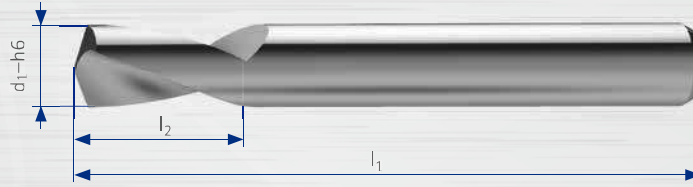


d_1 mm	l_2 mm	l_1 mm
2.00	8.50	25
3.00	9.50	32
4.00	10.50	40
5.00	16.00	50
6.00	16.00	50
8.00	20.00	60
10.00	22.00	70

NC-Anbohrer
Foret à pointer NC
Punta a centrare NC
NC spotting drill

Art. 50814

- P1-3
- M1,2
- K1,2
- N1-8
- O1



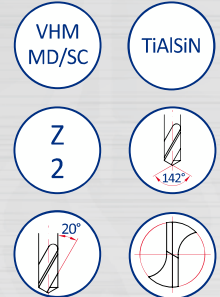
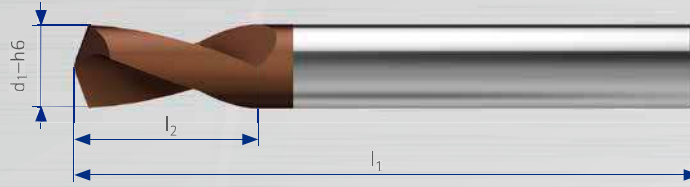
- VHM
MD/SC
- Z
2
-
-
-



d_1 mm	l_2 mm	l_1 mm
2.00	8.50	25
3.00	9.50	32
4.00	10.50	40
5.00	16.00	50
6.00	16.00	50
8.00	20.00	60
10.00	22.00	70
12.00	22.00	70
14.00	25.00	75
16.00	25.00	75
20.00	35.00	75

NC-Anbohrer
Foret à pointer NC
Punta a centrare NC
NC spotting drill

Art. 50815



d_1 mm	l_2 mm	l_1 mm
2.00	8.50	25
3.00	9.50	32
4.00	10.50	40
5.00	16.00	50
6.00	16.00	50
8.00	20.00	60
10.00	22.00	70

Zentriersenker
Foret à pointer et chanfreiner
Punta da centro e smusso
Spotting and chamfering drill

Art. 50818

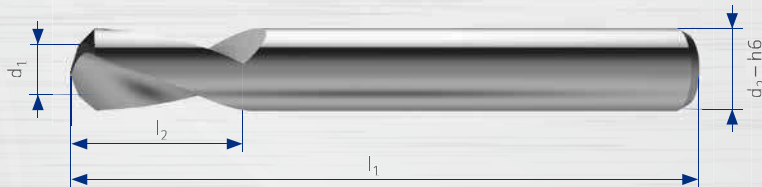
P1-3

M1,2

K1,2

N1-8

O1



VHM
MD/SC

Z
2

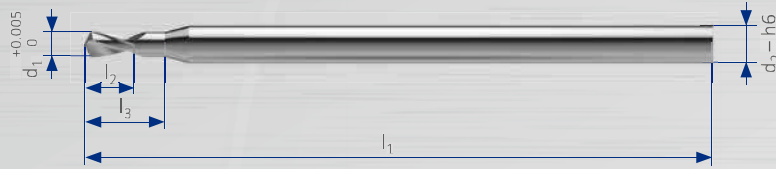


d ₁	l ₂	l ₁	d ₂
mm	mm	mm	mm
1.60	9.50	32	3.00
2.00	9.50	32	3.00
2.50	10.50	40	4.00
3.00	10.50	40	4.00
3.30	16.00	50	5.00
4.00	16.00	50	5.00
4.20	16.00	50	6.00
5.00	20.00	60	8.00
6.00	20.00	60	8.00
6.80	22.00	70	10.00
7.00	22.00	70	10.00
8.00	22.00	70	10.00
8.50	22.00	70	12.00
9.00	22.00	70	12.00
10.00	22.00	70	12.00
10.20	25.00	75	14.00
11.00	25.00	75	14.00
12.00	25.00	75	16.00

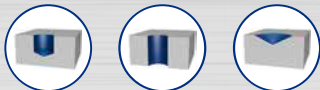
Pilotbohrer
Foret de préperçage
Punta per preforo
Pilot drill

Art. 56005

- P1-3 M1,2
- K1,2 N1-8
- S1 O1



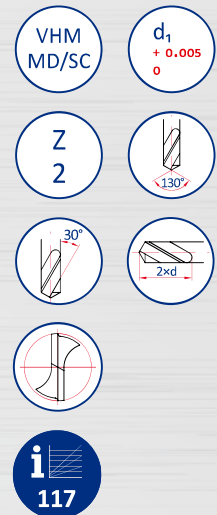
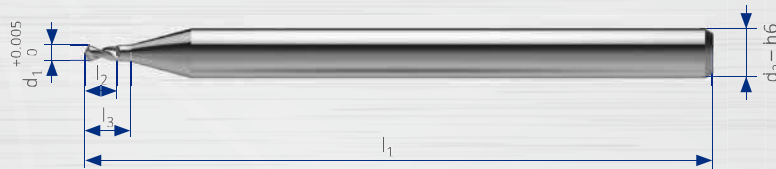
- VHM
MD/SC d_1
+ 0.005
0
- Z
2
130°
- 20°
2-4xd
-
- i**
117



d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
0.10	0.40	0.60	25	1.50
0.15	0.40	0.60	25	1.50
0.20	0.60	0.90	25	1.50
0.25	0.60	0.90	25	1.50
0.30	0.90	1.20	25	1.50
0.35	0.90	1.20	25	1.50
0.40	0.90	1.60	25	1.50
0.45	0.90	1.60	25	1.50
0.50	1.00	1.80	25	1.50
0.55	1.00	1.80	25	1.50
0.60	1.20	2.00	25	1.50
0.65	1.20	2.00	25	1.50
0.70	1.50	2.50	25	1.50
0.75	1.50	2.50	25	1.50
0.80	1.50	2.50	25	1.50
0.85	1.50	2.50	25	1.50
0.90	1.60	2.60	25	1.50
0.95	1.60	2.60	25	1.50
1.00	2.00	3.20	25	1.50
1.05	2.00	3.20	25	1.50
1.10	2.30	3.50	25	1.50
1.15	2.30	3.50	25	1.50
1.20	2.30	3.50	25	1.50
1.25	2.30	3.50	25	1.50
1.30	2.70	4.20	25	1.50
1.35	2.70	4.20	25	1.50
1.40	2.70	4.20	25	1.50
1.45	2.70	4.20	25	1.50
1.50	3.00	4.20	25	1.50

Pilotbohrer
Foret de préperçage
Punta per preforo
Pilot drill

Art. 56033

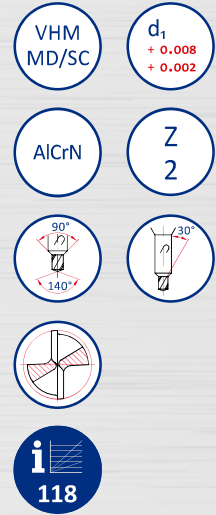
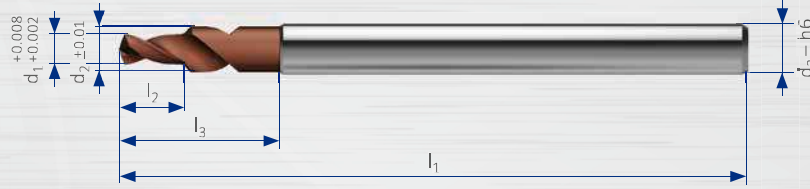


d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
0.03	0.15	0.30	38	3.00	0.41	0.82	1.60	38	3.00	0.79	1.58	2.30	38	3.00	1.17	2.34	3.80	38	3.00	
0.04	0.15	0.30	38	3.00	0.42	0.84	1.60	38	3.00	0.80	1.60	2.30	38	3.00	1.18	2.36	3.80	38	3.00	
0.05	0.20	0.40	38	3.00	0.43	0.86	1.60	38	3.00	0.81	1.62	2.40	38	3.00	1.19	2.38	3.80	38	3.00	
0.06	0.20	0.40	38	3.00	0.44	0.88	1.60	38	3.00	0.82	1.64	2.40	38	3.00	1.20	2.40	3.80	38	3.00	
0.07	0.25	0.45	38	3.00	0.45	0.90	1.60	38	3.00	0.83	1.66	2.40	38	3.00	1.21	2.42	4.20	38	3.00	
0.08	0.25	0.45	38	3.00	0.46	0.92	1.70	38	3.00	0.84	1.68	2.40	38	3.00	1.22	2.44	4.20	38	3.00	
0.09	0.30	0.50	38	3.00	0.47	0.94	1.70	38	3.00	0.85	1.70	2.40	38	3.00	1.23	2.46	4.20	38	3.00	
0.10	0.35	0.55	38	3.00	0.48	0.96	1.70	38	3.00	0.86	1.72	2.50	38	3.00	1.24	2.48	4.20	38	3.00	
0.11	0.35	0.55	38	3.00	0.49	0.98	1.70	38	3.00	0.87	1.74	2.50	38	3.00	1.25	2.50	4.20	38	3.00	
0.12	0.35	0.55	38	3.00	0.50	1.00	1.70	38	3.00	0.88	1.76	2.50	38	3.00	1.26	2.52	4.30	38	3.00	
0.13	0.40	0.60	38	3.00	0.51	1.02	1.80	38	3.00	0.89	1.78	2.50	38	3.00	1.27	2.54	4.30	38	3.00	
0.14	0.40	0.60	38	3.00	0.52	1.04	1.80	38	3.00	0.90	1.80	2.50	38	3.00	1.28	2.56	4.30	38	3.00	
0.15	0.40	0.60	38	3.00	0.53	1.06	1.80	38	3.00	0.91	1.82	2.60	38	3.00	1.29	2.58	4.30	38	3.00	
0.16	0.40	0.60	38	3.00	0.54	1.08	1.80	38	3.00	0.92	1.84	2.60	38	3.00	1.30	2.60	4.30	38	3.00	
0.17	0.50	0.70	38	3.00	0.55	1.10	1.80	38	3.00	0.93	1.86	2.60	38	3.00	1.31	2.62	4.40	38	3.00	
0.18	0.50	0.70	38	3.00	0.56	1.12	1.90	38	3.00	0.94	1.88	2.60	38	3.00	1.32	2.64	4.40	38	3.00	
0.19	0.50	0.70	38	3.00	0.57	1.14	1.90	38	3.00	0.95	1.90	2.60	38	3.00	1.33	2.66	4.40	38	3.00	
0.20	0.55	0.75	38	3.00	0.58	1.16	1.90	38	3.00	0.96	1.92	2.70	38	3.00	1.34	2.68	4.40	38	3.00	
0.21	0.55	0.75	38	3.00	0.59	1.18	1.90	38	3.00	0.97	1.94	2.70	38	3.00	1.35	2.70	4.40	38	3.00	
0.22	0.60	0.80	38	3.00	0.60	1.20	1.90	38	3.00	0.98	1.96	2.70	38	3.00	1.36	2.72	4.50	38	3.00	
0.23	0.60	0.80	38	3.00	0.61	1.22	2.00	38	3.00	0.99	1.98	2.70	38	3.00	1.37	2.74	4.50	38	3.00	
0.24	0.60	0.80	38	3.00	0.62	1.24	2.00	38	3.00	1.00	2.00	2.70	38	3.00	1.38	2.76	4.50	38	3.00	
0.25	0.70	0.90	38	3.00	0.63	1.26	2.00	38	3.00	1.01	2.02	3.50	38	3.00	1.39	2.78	4.50	38	3.00	
0.26	0.70	0.90	38	3.00	0.64	1.28	2.00	38	3.00	1.02	2.04	3.50	38	3.00	1.40	2.80	4.50	38	3.00	
0.27	0.70	0.90	38	3.00	0.65	1.30	2.00	38	3.00	1.03	2.06	3.50	38	3.00	1.41	2.82	4.60	38	3.00	
0.28	0.80	1.00	38	3.00	0.66	1.32	2.10	38	3.00	1.04	2.08	3.50	38	3.00	1.42	2.84	4.60	38	3.00	
0.29	0.80	1.00	38	3.00	0.67	1.34	2.10	38	3.00	1.05	2.10	3.50	38	3.00	1.43	2.86	4.60	38	3.00	
0.30	0.90	1.20	38	3.00	0.68	1.36	2.10	38	3.00	1.06	2.12	3.60	38	3.00	1.44	2.88	4.60	38	3.00	
0.31	0.90	1.20	38	3.00	0.69	1.38	2.10	38	3.00	1.07	2.14	3.60	38	3.00	1.45	2.90	4.60	38	3.00	
0.32	0.90	1.20	38	3.00	0.70	1.40	2.10	38	3.00	1.08	2.16	3.60	38	3.00	1.46	2.92	4.70	38	3.00	
0.33	0.90	1.20	38	3.00	0.71	1.42	2.20	38	3.00	1.09	2.18	3.60	38	3.00	1.47	2.94	4.70	38	3.00	
0.34	0.90	1.35	38	3.00	0.72	1.44	2.20	38	3.00	1.10	2.20	3.60	38	3.00	1.48	2.96	4.70	38	3.00	
0.35	0.90	1.35	38	3.00	0.73	1.46	2.20	38	3.00	1.11	2.22	3.70	38	3.00	1.49	2.98	4.70	38	3.00	
0.36	0.95	1.35	38	3.00	0.74	1.48	2.20	38	3.00	1.12	2.24	3.70	38	3.00	1.50	3.00	4.70	38	3.00	
0.37	0.95	1.35	38	3.00	0.75	1.50	2.20	38	3.00	1.13	2.26	3.70	38	3.00	1.51	3.02	5.10	38	3.00	
0.38	0.95	1.50	38	3.00	0.76	1.52	2.30	38	3.00	1.14	2.28	3.70	38	3.00	1.52	3.04	5.10	38	3.00	
0.39	0.95	1.50	38	3.00	0.77	1.54	2.30	38	3.00	1.15	2.30	3.70	38	3.00	1.53	3.06	5.10	38	3.00	
0.40	0.80	1.60	38	3.00	0.78	1.56	2.30	38	3.00	1.16	2.32	3.80	38	3.00	1.54	3.08	5.10	38	3.00	

d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1.55	3.10	5.10	38	3.00	1.93	3.86	5.90	38	3.00	2.31	4.62	6.70	38	3.00	2.69	5.38	7.40	38	3.00	
1.56	3.12	5.20	38	3.00	1.94	3.88	5.90	38	3.00	2.32	4.64	6.70	38	3.00	2.70	5.40	7.40	38	3.00	
1.57	3.14	5.20	38	3.00	1.95	3.90	5.90	38	3.00	2.33	4.66	6.70	38	3.00	2.71	5.42	7.50	38	3.00	
1.58	3.16	5.20	38	3.00	1.96	3.92	6.00	38	3.00	2.34	4.68	6.70	38	3.00	2.72	5.44	7.50	38	3.00	
1.59	3.18	5.20	38	3.00	1.97	3.94	6.00	38	3.00	2.35	4.70	6.70	38	3.00	2.73	5.46	7.50	38	3.00	
1.60	3.20	5.20	38	3.00	1.98	3.96	6.00	38	3.00	2.36	4.72	6.80	38	3.00	2.74	5.48	7.50	38	3.00	
1.61	3.22	5.30	38	3.00	1.99	3.98	6.00	38	3.00	2.37	4.74	6.80	38	3.00	2.75	5.50	7.50	38	3.00	
1.62	3.24	5.30	38	3.00	2.00	4.00	6.00	38	3.00	2.38	4.76	6.80	38	3.00	2.76	5.52	7.60	38	3.00	
1.63	3.26	5.30	38	3.00	2.01	4.02	6.10	38	3.00	2.39	4.78	6.80	38	3.00	2.77	5.54	7.60	38	3.00	
1.64	3.28	5.30	38	3.00	2.02	4.04	6.10	38	3.00	2.40	4.80	6.80	38	3.00	2.78	5.56	7.60	38	3.00	
1.65	3.30	5.30	38	3.00	2.03	4.06	6.10	38	3.00	2.41	4.82	6.90	38	3.00	2.79	5.58	7.60	38	3.00	
1.66	3.32	5.40	38	3.00	2.04	4.08	6.10	38	3.00	2.42	4.84	6.90	38	3.00	2.80	5.60	7.60	38	3.00	
1.67	3.34	5.40	38	3.00	2.05	4.10	6.10	38	3.00	2.43	4.86	6.90	38	3.00	2.81	5.62	7.70	38	3.00	
1.68	3.36	5.40	38	3.00	2.06	4.12	6.20	38	3.00	2.44	4.88	6.90	38	3.00	2.82	5.64	7.70	38	3.00	
1.69	3.38	5.40	38	3.00	2.07	4.14	6.20	38	3.00	2.45	4.90	6.90	38	3.00	2.83	5.66	7.70	38	3.00	
1.70	3.40	5.40	38	3.00	2.08	4.16	6.20	38	3.00	2.46	4.92	7.00	38	3.00	2.84	5.68	7.70	38	3.00	
1.71	3.42	5.50	38	3.00	2.09	4.18	6.20	38	3.00	2.47	4.94	7.00	38	3.00	2.85	5.70	7.70	38	3.00	
1.72	3.44	5.50	38	3.00	2.10	4.20	6.20	38	3.00	2.48	4.96	7.00	38	3.00	2.86	5.72	7.80	38	3.00	
1.73	3.46	5.50	38	3.00	2.11	4.22	6.30	38	3.00	2.49	4.98	7.00	38	3.00	2.87	5.74	7.80	38	3.00	
1.74	3.48	5.50	38	3.00	2.12	4.24	6.30	38	3.00	2.50	5.00	7.00	38	3.00	2.88	5.76	7.80	38	3.00	
1.75	3.50	5.50	38	3.00	2.13	4.26	6.30	38	3.00	2.51	5.02	7.10	38	3.00	2.89	5.78	7.80	38	3.00	
1.76	3.52	5.60	38	3.00	2.14	4.28	6.30	38	3.00	2.52	5.04	7.10	38	3.00	2.90	5.80	7.80	38	3.00	
1.77	3.54	5.60	38	3.00	2.15	4.30	6.30	38	3.00	2.53	5.06	7.10	38	3.00	2.91	5.82	7.90	38	3.00	
1.78	3.56	5.60	38	3.00	2.16	4.32	6.40	38	3.00	2.54	5.08	7.10	38	3.00	2.92	5.84	7.90	38	3.00	
1.79	3.58	5.60	38	3.00	2.17	4.34	6.40	38	3.00	2.55	5.10	7.10	38	3.00	2.93	5.86	7.90	38	3.00	
1.80	3.60	5.60	38	3.00	2.18	4.36	6.40	38	3.00	2.56	5.12	7.20	38	3.00	2.94	5.88	7.90	38	3.00	
1.81	3.62	5.70	38	3.00	2.19	4.38	6.40	38	3.00	2.57	5.14	7.20	38	3.00	2.95	5.90	7.90	38	3.00	
1.82	3.64	5.70	38	3.00	2.20	4.40	6.40	38	3.00	2.58	5.16	7.20	38	3.00	2.96	5.92	8.00	38	3.00	
1.83	3.66	5.70	38	3.00	2.21	4.42	6.50	38	3.00	2.59	5.18	7.20	38	3.00	2.97	5.94	8.00	38	3.00	
1.84	3.68	5.70	38	3.00	2.22	4.44	6.50	38	3.00	2.60	5.20	7.20	38	3.00	2.98	5.96	8.00	38	3.00	
1.85	3.70	5.70	38	3.00	2.23	4.46	6.50	38	3.00	2.61	5.22	7.30	38	3.00	2.99	5.98	8.00	38	3.00	
1.86	3.72	5.80	38	3.00	2.24	4.48	6.50	38	3.00	2.62	5.24	7.30	38	3.00						
1.87	3.74	5.80	38	3.00	2.25	4.50	6.50	38	3.00	2.63	5.26	7.30	38	3.00						
1.88	3.76	5.80	38	3.00	2.26	4.52	6.60	38	3.00	2.64	5.28	7.30	38	3.00						
1.89	3.78	5.80	38	3.00	2.27	4.54	6.60	38	3.00	2.65	5.30	7.30	38	3.00						
1.90	3.80	5.80	38	3.00	2.28	4.56	6.60	38	3.00	2.66	5.32	7.40	38	3.00						
1.91	3.82	5.90	38	3.00	2.29	4.58	6.60	38	3.00	2.67	5.34	7.40	38	3.00						
1.92	3.84	5.90	38	3.00	2.30	4.60	6.60	38	3.00	2.68	5.36	7.40	38	3.00						

Pilot-Stufenbohrer
Foret étagé de préperçage
Punta a gradino per preforo
Pilot step drill

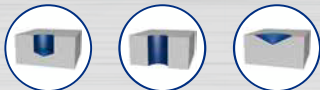
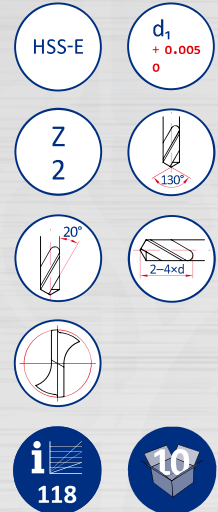
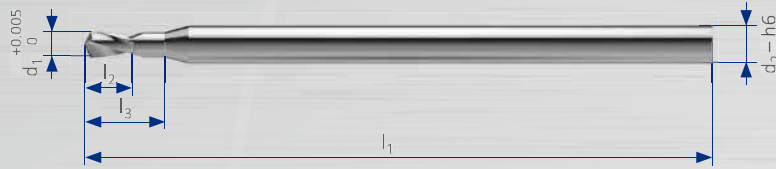
Art. 56036



d ₁	d ₂	l ₂	l ₃	l ₁	d ₃	d ₁	d ₂	l ₂	l ₃	l ₁	d ₃	d ₁	d ₂	l ₂	l ₃	l ₁	d ₃
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
0.30	0.70	0.60	2.50	50	4.00	2.10	3.20	4.20	11.00	50	4.00	3.90	5.40	7.80	16.00	55	6.00
0.35	0.70	0.70	2.50	50	4.00	2.15	3.20	4.30	11.00	50	4.00	3.95	5.40	7.90	16.50	55	6.00
0.40	1.00	0.80	3.00	50	4.00	2.20	3.20	4.40	11.00	50	4.00	4.00	5.40	8.00	16.50	55	6.00
0.45	1.00	0.90	3.00	50	4.00	2.25	3.40	4.50	12.00	50	4.00	4.05	5.60	8.10	16.50	55	6.00
0.50	1.20	1.00	3.50	50	4.00	2.30	3.40	4.60	12.00	50	4.00	4.10	5.60	8.20	16.50	55	6.00
0.55	1.30	1.10	3.50	50	4.00	2.35	3.40	4.70	12.00	50	4.00	4.15	5.60	8.30	17.00	55	6.00
0.60	1.40	1.20	4.30	50	4.00	2.40	3.40	4.80	12.00	50	4.00	4.20	5.60	8.40	17.00	55	6.00
0.65	1.50	1.30	4.30	50	4.00	2.45	3.60	4.90	12.70	50	4.00	4.25	5.80	8.50	17.00	64	8.00
0.70	1.80	1.40	5.30	50	4.00	2.50	3.60	5.00	12.70	50	4.00	4.30	5.80	8.60	17.00	64	8.00
0.75	1.80	1.50	5.30	50	4.00	2.55	3.60	5.10	12.70	50	4.00	4.35	5.80	8.70	17.50	64	8.00
0.80	2.00	1.60	6.00	50	4.00	2.60	3.60	5.20	12.70	50	4.00	4.40	5.80	8.80	17.50	64	8.00
0.85	2.00	1.70	6.00	50	4.00	2.65	3.80	5.30	13.50	50	4.00	4.45	6.00	8.90	17.50	64	8.00
0.90	2.00	1.80	6.00	50	4.00	2.70	3.80	5.40	13.50	50	4.00	4.50	6.00	9.00	18.00	64	8.00
0.95	2.00	1.90	6.00	50	4.00	2.75	3.80	5.50	13.50	50	4.00	4.55	6.00	9.10	18.00	64	8.00
1.00	2.20	2.00	7.00	50	4.00	2.80	3.80	5.60	13.50	50	4.00	4.60	6.00	9.20	18.00	64	8.00
1.05	2.20	2.10	7.00	50	4.00	2.85	4.00	5.70		50	4.00	4.65	6.20	9.30	18.50	64	8.00
1.10	2.20	2.20	7.00	50	4.00	2.90	4.00	5.80		50	4.00	4.70	6.20	9.40	18.50	64	8.00
1.15	2.20	2.30	7.00	50	4.00	2.95	4.00	5.90		50	4.00	4.75	6.20	9.50	18.50	64	8.00
1.20	2.20	2.40	7.00	50	4.00	3.00	4.00	6.00		50	4.00	4.80	6.20	9.60	19.00	64	8.00
1.25	2.50	2.50	8.00	50	4.00	3.05	4.60	6.10	14.00	55	6.00	4.85	6.40	9.70	19.00	64	8.00
1.30	2.50	2.60	8.00	50	4.00	3.10	4.60	6.20	14.50	55	6.00	4.90	6.40	9.80	19.00	64	8.00
1.35	2.50	2.70	8.00	50	4.00	3.15	4.60	6.30	14.50	55	6.00	4.95	6.40	9.90	19.50	64	8.00
1.40	2.50	2.80	8.00	50	4.00	3.20	4.60	6.40	14.50	55	6.00	5.00	6.40	10.00	19.50	64	8.00
1.45	2.70	2.90	9.00	50	4.00	3.25	4.80	6.50	14.50	55	6.00	5.05	6.60	10.10	19.50	64	8.00
1.50	2.70	3.00	9.00	50	4.00	3.30	4.80	6.60	14.50	55	6.00	5.10	6.60	10.20	20.00	64	8.00
1.55	2.70	3.10	9.00	50	4.00	3.35	4.80	6.70	15.00	55	6.00	5.15	6.60	10.30	20.00	64	8.00
1.60	2.70	3.20	9.00	50	4.00	3.40	4.80	6.80	15.00	55	6.00	5.20	6.60	10.40	20.00	64	8.00
1.65	2.80	3.30	9.50	50	4.00	3.45	5.00	6.90	15.00	55	6.00	5.25	6.80	10.50	20.50	64	8.00
1.70	2.80	3.40	9.50	50	4.00	3.50	5.00	7.00	15.00	55	6.00	5.30	6.80	10.60	20.50	64	8.00
1.75	2.80	3.50	9.50	50	4.00	3.55	5.00	7.10	15.50	55	6.00	5.35	6.80	10.70	20.50	64	8.00
1.80	2.80	3.60	9.50	50	4.00	3.60	5.00	7.20	15.50	55	6.00	5.40	6.80	10.80	21.00	64	8.00
1.85	3.00	3.70	10.20	50	4.00	3.65	5.20	7.30	15.50	55	6.00	5.45	7.00	10.90	21.00	64	8.00
1.90	3.00	3.80	10.20	50	4.00	3.70	5.20	7.40	15.50	55	6.00	5.50	7.00	11.00	21.00	64	8.00
1.95	3.00	3.90	10.20	50	4.00	3.75	5.20	7.50	16.00	55	6.00	5.55	7.00	11.10	21.50	64	8.00
2.00	3.00	4.00	10.20	50	4.00	3.80	5.20	7.60	16.00	55	6.00	5.60	7.00	11.20	21.50	64	8.00
2.05	3.20	4.10	11.00	50	4.00	3.85	5.40	7.70	16.00	55	6.00	5.65	7.20	11.30	21.50	64	8.00

Pilotbohrer Spirec
Foret de préperçage Spirec
Punta per preforo Spirec
Pilot drill Spirec

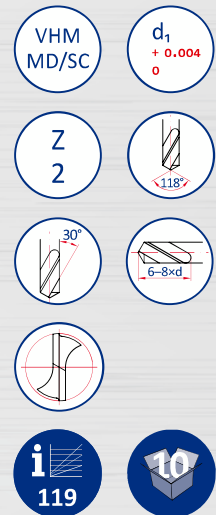
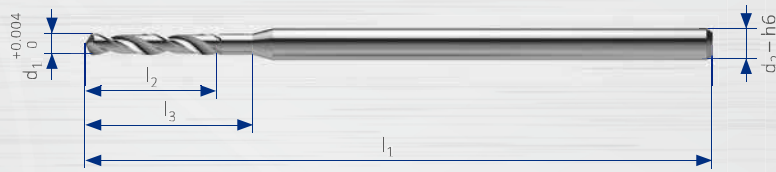
Art. 16004



d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
0.10	0.40	0.60	25	1.50
0.15	0.40	0.60	25	1.50
0.20	0.60	0.90	25	1.50
0.25	0.60	0.90	25	1.50
0.30	0.90	1.20	25	1.50
0.35	0.90	1.20	25	1.50
0.40	0.90	1.60	25	1.50
0.45	0.90	1.60	25	1.50
0.50	1.00	1.80	25	1.50
0.55	1.00	1.80	25	1.50
0.60	1.20	2.00	25	1.50
0.65	1.20	2.00	25	1.50
0.70	1.50	2.50	25	1.50
0.75	1.50	2.50	25	1.50
0.80	1.50	2.50	25	1.50
0.85	1.50	2.50	25	1.50
0.90	1.60	2.60	25	1.50
0.95	1.60	2.60	25	1.50
1.00	2.00	3.20	25	1.50
1.05	2.00	3.20	25	1.50
1.10	2.30	3.50	25	1.50
1.15	2.30	3.50	25	1.50
1.20	2.30	3.50	25	1.50
1.25	2.30	3.50	25	1.50
1.30	2.70	4.20	25	1.50
1.35	2.70	4.20	25	1.50
1.40	2.70	4.20	25	1.50
1.45	2.70	4.20	25	1.50
1.50	3.00	4.20	25	1.50

Mikrobohrer Spirec-Plus
Micro foret Spirec-Plus
Micro punta Spirec-Plus
Micro drill Spirec-Plus

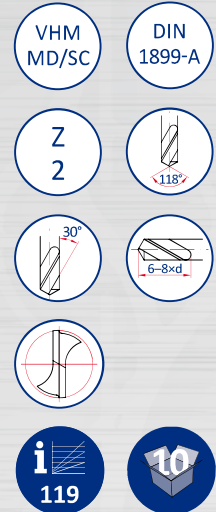
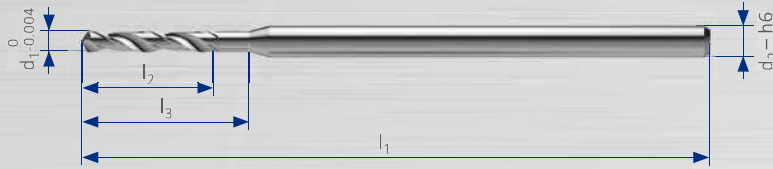
Art. 50695



d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
0.20	1.50	1.80	30	1.00	0.58	3.60	4.50	30	1.00	0.96	6.50	8.00	30	1.50	1.34	9.20	11.20	30	1.50	
0.21	1.50	1.80	30	1.00	0.59	3.60	4.50	30	1.00	0.97	6.50	8.00	30	1.50	1.35	9.20	11.20	30	1.50	
0.22	1.50	1.80	30	1.00	0.60	3.60	4.50	30	1.00	0.98	6.50	8.00	30	1.50	1.36	9.20	11.20	30	1.50	
0.23	1.50	1.80	30	1.00	0.61	3.90	5.00	30	1.00	0.99	6.50	8.00	30	1.50	1.37	9.20	11.20	30	1.50	
0.24	1.50	1.80	30	1.00	0.62	3.90	5.00	30	1.00	1.00	6.50	8.00	30	1.50	1.38	9.20	11.20	30	1.50	
0.25	1.90	2.20	30	1.00	0.63	3.90	5.00	30	1.00	1.01	6.50	8.00	30	1.50	1.39	9.20	11.20	30	1.50	
0.26	1.90	2.20	30	1.00	0.64	3.90	5.00	30	1.00	1.02	6.50	8.00	30	1.50	1.40	9.20	11.20	30	1.50	
0.27	1.90	2.20	30	1.00	0.65	3.90	5.00	30	1.00	1.03	6.50	8.00	30	1.50	1.41	9.20	11.20	30	1.50	
0.28	1.90	2.20	30	1.00	0.66	3.90	5.00	30	1.00	1.04	6.50	8.00	30	1.50	1.42	9.20	11.20	30	1.50	
0.29	1.90	2.20	30	1.00	0.67	3.90	5.00	30	1.00	1.05	6.50	8.00	30	1.50	1.43	9.20	11.20	30	1.50	
0.30	1.90	2.20	30	1.00	0.68	4.50	5.60	30	1.00	1.06	7.30	9.00	30	1.50	1.44	9.20	11.20	30	1.50	
0.31	2.40	2.80	30	1.00	0.69	4.50	5.60	30	1.00	1.07	7.30	9.00	30	1.50	1.45	9.20	11.20	30	1.50	
0.32	2.40	2.80	30	1.00	0.70	4.50	5.60	30	1.00	1.08	7.30	9.00	30	1.50	1.46	9.20	11.20	30	1.50	
0.33	2.40	2.80	30	1.00	0.71	4.50	5.60	30	1.00	1.09	7.30	9.00	30	1.50	1.47	9.20	11.20	30	1.50	
0.34	2.40	2.80	30	1.00	0.72	4.50	5.60	30	1.00	1.10	7.30	9.00	30	1.50	1.48	9.20	11.20	30	1.50	
0.35	2.40	2.80	30	1.00	0.73	4.50	5.60	30	1.00	1.11	7.30	9.00	30	1.50	1.49	9.20	11.20	30	1.50	
0.36	2.40	2.80	30	1.00	0.74	4.50	5.60	30	1.00	1.12	7.30	9.00	30	1.50	1.50	9.20	11.20	30	1.50	
0.37	2.40	2.80	30	1.00	0.75	4.50	5.60	30	1.00	1.13	7.30	9.00	30	1.50						
0.38	2.40	2.80	30	1.00	0.76	5.00	6.30	30	1.00	1.14	7.30	9.00	30	1.50						
0.39	2.70	3.60	30	1.00	0.77	5.00	6.30	30	1.00	1.15	7.30	9.00	30	1.50						
0.40	2.70	3.60	30	1.00	0.78	5.00	6.30	30	1.00	1.16	8.20	10.00	30	1.50						
0.41	2.70	3.60	30	1.00	0.79	5.00	6.30	30	1.00	1.17	8.20	10.00	30	1.50						
0.42	2.70	3.60	30	1.00	0.80	5.00	6.30	30	1.50	1.18	8.20	10.00	30	1.50						
0.43	2.70	3.60	30	1.00	0.81	5.00	6.30	30	1.50	1.19	8.20	10.00	30	1.50						
0.44	2.70	3.60	30	1.00	0.82	5.00	6.30	30	1.50	1.20	8.20	10.00	30	1.50						
0.45	2.70	3.60	30	1.00	0.83	5.00	6.30	30	1.50	1.21	8.20	10.00	30	1.50						
0.46	2.70	3.60	30	1.00	0.84	5.00	6.30	30	1.50	1.22	8.20	10.00	30	1.50						
0.47	2.70	3.60	30	1.00	0.85	5.00	6.30	30	1.50	1.23	8.20	10.00	30	1.50						
0.48	2.70	3.60	30	1.00	0.86	5.70	7.10	30	1.50	1.24	8.20	10.00	30	1.50						
0.49	3.20	4.00	30	1.00	0.87	5.70	7.10	30	1.50	1.25	8.20	10.00	30	1.50						
0.50	3.20	4.00	30	1.00	0.88	5.70	7.10	30	1.50	1.26	8.20	10.00	30	1.50						
0.51	3.20	4.00	30	1.00	0.89	5.70	7.10	30	1.50	1.27	8.20	10.00	30	1.50						
0.52	3.20	4.00	30	1.00	0.90	5.70	7.10	30	1.50	1.28	8.20	10.00	30	1.50						
0.53	3.20	4.00	30	1.00	0.91	5.70	7.10	30	1.50	1.29	8.20	10.00	30	1.50						
0.54	3.60	4.50	30	1.00	0.92	5.70	7.10	30	1.50	1.30	8.20	10.00	30	1.50						
0.55	3.60	4.50	30	1.00	0.93	5.70	7.10	30	1.50	1.31	9.20	11.20	30	1.50						
0.56	3.60	4.50	30	1.00	0.94	5.70	7.10	30	1.50	1.32	9.20	11.20	30	1.50						
0.57	3.60	4.50	30	1.00	0.95	5.70	7.10	30	1.50	1.33	9.20	11.20	30	1.50						

Mikrobohrer Spiroc
Micro foret Spiroc
Micro punta Spiroc
Micro drill Spiroc

Art. 50699



d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
0.05	0.40	0.60	25	1.00	0.43	2.70	3.60	25	1.00	0.81	5.00	6.30	25	1.50	1.19	8.20	10.00	25	1.50	
0.06	0.40	0.60	25	1.00	0.44	2.70	3.60	25	1.00	0.82	5.00	6.30	25	1.50	1.20	8.20	10.00	25	1.50	
0.07	0.50	0.70	25	1.00	0.45	2.70	3.60	25	1.00	0.83	5.00	6.30	25	1.50	1.21	8.20	10.00	25	1.50	
0.08	0.50	0.70	25	1.00	0.46	2.70	3.60	25	1.00	0.84	5.00	6.30	25	1.50	1.22	8.20	10.00	25	1.50	
0.09	0.50	0.70	25	1.00	0.47	2.70	3.60	25	1.00	0.85	5.00	6.30	25	1.50	1.23	8.20	10.00	25	1.50	
0.10	0.50	0.70	25	1.00	0.48	2.70	3.60	25	1.00	0.86	5.70	7.10	25	1.50	1.24	8.20	10.00	25	1.50	
0.11	0.50	0.70	25	1.00	0.49	3.20	4.00	25	1.00	0.87	5.70	7.10	25	1.50	1.25	8.20	10.00	25	1.50	
0.12	0.50	0.70	25	1.00	0.50	3.20	4.00	25	1.00	0.88	5.70	7.10	25	1.50	1.26	8.20	10.00	25	1.50	
0.13	0.80	1.00	25	1.00	0.51	3.20	4.00	25	1.00	0.89	5.70	7.10	25	1.50	1.27	8.20	10.00	25	1.50	
0.14	0.80	1.00	25	1.00	0.52	3.20	4.00	25	1.00	0.90	5.70	7.10	25	1.50	1.28	8.20	10.00	25	1.50	
0.15	0.80	1.00	25	1.00	0.53	3.20	4.00	25	1.00	0.91	5.70	7.10	25	1.50	1.29	8.20	10.00	25	1.50	
0.16	1.10	1.40	25	1.00	0.54	3.60	4.50	25	1.00	0.92	5.70	7.10	25	1.50	1.30	8.20	10.00	25	1.50	
0.17	1.10	1.40	25	1.00	0.55	3.60	4.50	25	1.00	0.93	5.70	7.10	25	1.50	1.31	9.20	11.20	25	1.50	
0.18	1.10	1.40	25	1.00	0.56	3.60	4.50	25	1.00	0.94	5.70	7.10	25	1.50	1.32	9.20	11.20	25	1.50	
0.19	1.10	1.40	25	1.00	0.57	3.60	4.50	25	1.00	0.95	5.70	7.10	25	1.50	1.33	9.20	11.20	25	1.50	
0.20	1.50	1.80	25	1.00	0.58	3.60	4.50	25	1.00	0.96	6.50	8.00	25	1.50	1.34	9.20	11.20	25	1.50	
0.21	1.50	1.80	25	1.00	0.59	3.60	4.50	25	1.00	0.97	6.50	8.00	25	1.50	1.35	9.20	11.20	25	1.50	
0.22	1.50	1.80	25	1.00	0.60	3.60	4.50	25	1.00	0.98	6.50	8.00	25	1.50	1.36	9.20	11.20	25	1.50	
0.23	1.50	1.80	25	1.00	0.61	3.90	5.00	25	1.00	0.99	6.50	8.00	25	1.50	1.37	9.20	11.20	25	1.50	
0.24	1.50	1.80	25	1.00	0.62	3.90	5.00	25	1.00	1.00	6.50	8.00	25	1.50	1.38	9.20	11.20	25	1.50	
0.25	1.90	2.20	25	1.00	0.63	3.90	5.00	25	1.00	1.01	6.50	8.00	25	1.50	1.39	9.20	11.20	25	1.50	
0.26	1.90	2.20	25	1.00	0.64	3.90	5.00	25	1.00	1.02	6.50	8.00	25	1.50	1.40	9.20	11.20	25	1.50	
0.27	1.90	2.20	25	1.00	0.65	3.90	5.00	25	1.00	1.03	6.50	8.00	25	1.50	1.41	9.20	11.20	25	1.50	
0.28	1.90	2.20	25	1.00	0.66	3.90	5.00	25	1.00	1.04	6.50	8.00	25	1.50	1.42	9.20	11.20	25	1.50	
0.29	1.90	2.20	25	1.00	0.67	3.90	5.00	25	1.00	1.05	6.50	8.00	25	1.50	1.43	9.20	11.20	25	1.50	
0.30	1.90	2.20	25	1.00	0.68	4.50	5.60	25	1.00	1.06	7.30	9.00	25	1.50	1.44	9.20	11.20	25	1.50	
0.31	2.40	2.80	25	1.00	0.69	4.50	5.60	25	1.00	1.07	7.30	9.00	25	1.50	1.45	9.20	11.20	25	1.50	
0.32	2.40	2.80	25	1.00	0.70	4.50	5.60	25	1.00	1.08	7.30	9.00	25	1.50	1.46	9.20	11.20	25	1.50	
0.33	2.40	2.80	25	1.00	0.71	4.50	5.60	25	1.00	1.09	7.30	9.00	25	1.50	1.47	9.20	11.20	25	1.50	
0.34	2.40	2.80	25	1.00	0.72	4.50	5.60	25	1.00	1.10	7.30	9.00	25	1.50	1.48	9.20	11.20	25	1.50	
0.35	2.40	2.80	25	1.00	0.73	4.50	5.60	25	1.00	1.11	7.30	9.00	25	1.50	1.49	9.20	11.20	25	1.50	
0.36	2.40	2.80	25	1.00	0.74	4.50	5.60	25	1.00	1.12	7.30	9.00	25	1.50	1.50	9.20	11.20	25	1.50	
0.37	2.40	2.80	25	1.00	0.75	4.50	5.60	25	1.00	1.13	7.30	9.00	25	1.50	1.51	11.20	13.40	38	2.00	
0.38	2.40	2.80	25	1.00	0.76	5.00	6.30	25	1.00	1.14	7.30	9.00	25	1.50	1.52	11.20	13.40	38	2.00	
0.39	2.70	3.60	25	1.00	0.77	5.00	6.30	25	1.00	1.15	7.30	9.00	25	1.50	1.53	11.20	13.40	38	2.00	
0.40	2.70	3.60	25	1.00	0.78	5.00	6.30	25	1.00	1.16	8.20	10.00	25	1.50	1.54	11.20	13.40	38	2.00	
0.41	2.70	3.60	25	1.00	0.79	5.00	6.30	25	1.00	1.17	8.20	10.00	25	1.50	1.55	11.20	13.40	38	2.00	
0.42	2.70	3.60	25	1.00	0.80	5.00	6.30	25	1.50	1.18	8.20	10.00	25	1.50	1.56	11.20	13.40	38	2.00	



d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
1.57	11.20	13.40	38	2.00
1.58	11.20	13.40	38	2.00
1.59	11.20	13.40	38	2.00
1.60	11.20	13.40	38	2.00
1.61	11.20	13.40	38	2.00
1.62	11.20	13.40	38	2.00
1.63	11.20	13.40	38	2.00
1.64	11.20	13.40	38	2.00
1.65	11.20	13.40	38	2.00
1.66	11.20	13.40	38	2.00
1.67	11.20	13.40	38	2.00
1.68	11.20	13.40	38	2.00

d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
1.69	11.20	13.40	38	2.00
1.70	11.20	13.40	38	2.00
1.71	11.20	13.40	38	2.00
1.72	11.20	13.40	38	2.00
1.73	11.20	13.40	38	2.00
1.74	11.20	13.40	38	2.00
1.75	11.20	13.40	38	2.00
1.76	11.20	13.40	38	2.00
1.77	11.20	13.40	38	2.00
1.78	11.20	13.40	38	2.00
1.79	11.20	13.40	38	2.00
1.80	11.20	13.40	38	2.00

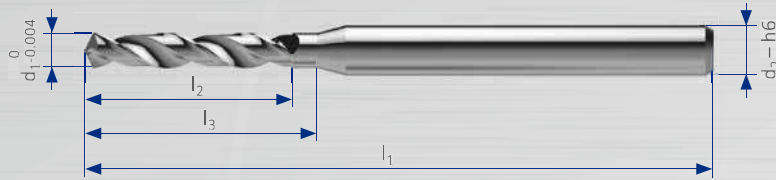
d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
1.81	11.20	13.40	38	2.00
1.82	11.20	13.40	38	2.00
1.83	11.20	13.40	38	2.00
1.84	11.20	13.40	38	2.00
1.85	11.20	13.40	38	2.00
1.86	11.20	13.40	38	2.00
1.87	11.20	13.40	38	2.00
1.88	11.20	13.40	38	2.00
1.89	11.20	13.40	38	2.00
1.90	11.20	13.40	38	2.00
1.91	11.20	13.40	38	2.00
1.92	11.20	13.40	38	2.00

d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
1.93	11.20	13.40	38	2.00
1.94	11.20	13.40	38	2.00
1.95	11.20	13.40	38	2.00
1.96	11.20	13.40	38	2.00
1.97	11.20	13.40	38	2.00
1.98	11.20	13.40	38	2.00
1.99	11.20	13.40	38	2.00
2.00	11.20	13.40	38	2.00

Mikrobohrer
Micro foret
Micro punta
Micro drill

Art. 51200

- P1-3
- M1,2
- K1,2
- N1-8
- S1
- O1



- VHM MD/SC
- Z 2
- 130°
- 35°
- 6xd
- Flute profile diagram



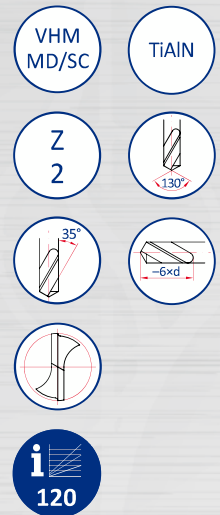
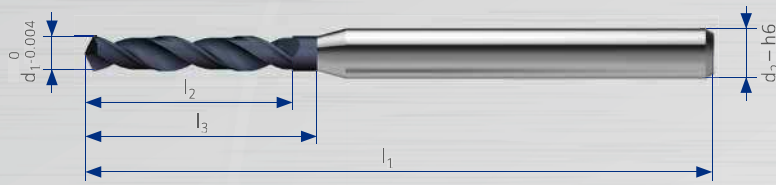
d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
0.03	0.25	0.35	38	3.00	0.41	2.70	3.60	38	3.00	0.79	5.00	6.30	38	3.00	1.17	8.20	10.00	38	3.00
0.04	0.30	0.40	38	3.00	0.42	2.70	3.60	38	3.00	0.80	5.00	6.30	38	3.00	1.18	8.20	10.00	38	3.00
0.05	0.35	0.45	38	3.00	0.43	2.70	3.60	38	3.00	0.81	5.00	6.30	38	3.00	1.19	8.20	10.00	38	3.00
0.06	0.40	0.50	38	3.00	0.44	2.70	3.60	38	3.00	0.82	5.00	6.30	38	3.00	1.20	8.20	10.00	38	3.00
0.07	0.45	0.60	38	3.00	0.45	2.70	3.60	38	3.00	0.83	5.00	6.30	38	3.00	1.21	8.20	10.00	38	3.00
0.08	0.50	0.70	38	3.00	0.46	2.70	3.60	38	3.00	0.84	5.00	6.30	38	3.00	1.22	8.20	10.00	38	3.00
0.09	0.50	0.70	38	3.00	0.47	2.70	3.60	38	3.00	0.85	5.00	6.30	38	3.00	1.23	8.20	10.00	38	3.00
0.10	0.50	0.70	38	3.00	0.48	2.70	3.60	38	3.00	0.86	5.70	7.10	38	3.00	1.24	8.20	10.00	38	3.00
0.11	0.50	0.70	38	3.00	0.49	3.20	4.00	38	3.00	0.87	5.70	7.10	38	3.00	1.25	8.20	10.00	38	3.00
0.12	0.50	0.70	38	3.00	0.50	3.20	4.00	38	3.00	0.88	5.70	7.10	38	3.00	1.26	8.20	10.00	38	3.00
0.13	0.80	1.00	38	3.00	0.51	3.20	4.00	38	3.00	0.89	5.70	7.10	38	3.00	1.27	8.20	10.00	38	3.00
0.14	0.80	1.00	38	3.00	0.52	3.20	4.00	38	3.00	0.90	5.70	7.10	38	3.00	1.28	8.20	10.00	38	3.00
0.15	0.80	1.00	38	3.00	0.53	3.20	4.00	38	3.00	0.91	5.70	7.10	38	3.00	1.29	8.20	10.00	38	3.00
0.16	1.10	1.40	38	3.00	0.54	3.60	4.50	38	3.00	0.92	5.70	7.10	38	3.00	1.30	8.20	10.00	38	3.00
0.17	1.10	1.40	38	3.00	0.55	3.60	4.50	38	3.00	0.93	5.70	7.10	38	3.00	1.31	9.20	11.20	38	3.00
0.18	1.10	1.40	38	3.00	0.56	3.60	4.50	38	3.00	0.94	5.70	7.10	38	3.00	1.32	9.20	11.20	38	3.00
0.19	1.10	1.40	38	3.00	0.57	3.60	4.50	38	3.00	0.95	5.70	7.10	38	3.00	1.33	9.20	11.20	38	3.00
0.20	1.50	1.80	38	3.00	0.58	3.60	4.50	38	3.00	0.96	6.50	8.00	38	3.00	1.34	9.20	11.20	38	3.00
0.21	1.50	1.80	38	3.00	0.59	3.60	4.50	38	3.00	0.97	6.50	8.00	38	3.00	1.35	9.20	11.20	38	3.00
0.22	1.50	1.80	38	3.00	0.60	3.60	4.50	38	3.00	0.98	6.50	8.00	38	3.00	1.36	9.20	11.20	38	3.00
0.23	1.50	1.80	38	3.00	0.61	3.90	5.00	38	3.00	0.99	6.50	8.00	38	3.00	1.37	9.20	11.20	38	3.00
0.24	1.50	1.80	38	3.00	0.62	3.90	5.00	38	3.00	1.00	6.50	8.00	38	3.00	1.38	9.20	11.20	38	3.00
0.25	1.90	2.20	38	3.00	0.63	3.90	5.00	38	3.00	1.01	6.50	8.00	38	3.00	1.39	9.20	11.20	38	3.00
0.26	1.90	2.20	38	3.00	0.64	3.90	5.00	38	3.00	1.02	6.50	8.00	38	3.00	1.40	9.20	11.20	38	3.00
0.27	1.90	2.20	38	3.00	0.65	3.90	5.00	38	3.00	1.03	6.50	8.00	38	3.00	1.41	9.20	11.20	38	3.00
0.28	1.90	2.20	38	3.00	0.66	3.90	5.00	38	3.00	1.04	6.50	8.00	38	3.00	1.42	9.20	11.20	38	3.00
0.29	1.90	2.20	38	3.00	0.67	3.90	5.00	38	3.00	1.05	6.50	8.00	38	3.00	1.43	9.20	11.20	38	3.00
0.30	1.80	2.40	38	3.00	0.68	4.50	5.60	38	3.00	1.06	7.30	9.00	38	3.00	1.44	9.20	11.20	38	3.00
0.31	1.80	2.40	38	3.00	0.69	4.50	5.60	38	3.00	1.07	7.30	9.00	38	3.00	1.45	9.20	11.20	38	3.00
0.32	1.80	2.40	38	3.00	0.70	4.50	5.60	38	3.00	1.08	7.30	9.00	38	3.00	1.46	9.20	11.20	38	3.00
0.33	1.80	2.40	38	3.00	0.71	4.50	5.60	38	3.00	1.09	7.30	9.00	38	3.00	1.47	9.20	11.20	38	3.00
0.34	1.80	2.40	38	3.00	0.72	4.50	5.60	38	3.00	1.10	7.30	9.00	38	3.00	1.48	9.20	11.20	38	3.00
0.35	2.20	2.80	38	3.00	0.73	4.50	5.60	38	3.00	1.11	7.30	9.00	38	3.00	1.49	9.20	11.20	38	3.00
0.36	2.20	2.80	38	3.00	0.74	4.50	5.60	38	3.00	1.12	7.30	9.00	38	3.00	1.50	9.20	11.20	38	3.00
0.37	2.20	2.80	38	3.00	0.75	4.50	5.60	38	3.00	1.13	7.30	9.00	38	3.00	1.51	11.20	13.40	38	3.00
0.38	2.20	2.80	38	3.00	0.76	5.00	6.30	38	3.00	1.14	7.30	9.00	38	3.00	1.52	11.20	13.40	38	3.00
0.39	2.70	3.60	38	3.00	0.77	5.00	6.30	38	3.00	1.15	7.30	9.00	38	3.00	1.53	11.20	13.40	38	3.00
0.40	2.70	3.60	38	3.00	0.78	5.00	6.30	38	3.00	1.16	8.20	10.00	38	3.00	1.54	11.20	13.40	38	3.00



d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1.55	11.20	13.40	38	3.00	1.93	11.20	13.40	38	3.00	2.31	12.50	14.00	38	3.00	2.69	14.00	17.00	38	3.00	
1.56	11.20	13.40	38	3.00	1.94	11.20	13.40	38	3.00	2.32	12.50	14.00	38	3.00	2.70	14.00	17.00	38	3.00	
1.57	11.20	13.40	38	3.00	1.95	11.20	13.40	38	3.00	2.33	12.50	14.00	38	3.00	2.71	14.00	17.00	38	3.00	
1.58	11.20	13.40	38	3.00	1.96	11.20	13.40	38	3.00	2.34	12.50	14.00	38	3.00	2.72	14.00	17.00	38	3.00	
1.59	11.20	13.40	38	3.00	1.97	11.20	13.40	38	3.00	2.35	12.50	14.00	38	3.00	2.73	14.00	17.00	38	3.00	
1.60	11.20	13.40	38	3.00	1.98	11.20	13.40	38	3.00	2.36	12.50	14.00	38	3.00	2.74	14.00	17.00	38	3.00	
1.61	11.20	13.40	38	3.00	1.99	11.20	13.40	38	3.00	2.37	12.50	14.00	38	3.00	2.75	14.00	17.00	38	3.00	
1.62	11.20	13.40	38	3.00	2.00	11.20	13.40	38	3.00	2.38	12.50	14.00	38	3.00	2.76	14.00	17.00	38	3.00	
1.63	11.20	13.40	38	3.00	2.01	12.50	14.00	38	3.00	2.39	12.50	14.00	38	3.00	2.77	14.00	17.00	38	3.00	
1.64	11.20	13.40	38	3.00	2.02	12.50	14.00	38	3.00	2.40	12.50	14.00	38	3.00	2.78	14.00	17.00	38	3.00	
1.65	11.20	13.40	38	3.00	2.03	12.50	14.00	38	3.00	2.41	12.50	14.00	38	3.00	2.79	14.00	17.00	38	3.00	
1.66	11.20	13.40	38	3.00	2.04	12.50	14.00	38	3.00	2.42	12.50	14.00	38	3.00	2.80	14.00	17.00	38	3.00	
1.67	11.20	13.40	38	3.00	2.05	12.50	14.00	38	3.00	2.43	12.50	14.00	38	3.00	2.81	14.00	17.00	38	3.00	
1.68	11.20	13.40	38	3.00	2.06	12.50	14.00	38	3.00	2.44	12.50	14.00	38	3.00	2.82	14.00	17.00	38	3.00	
1.69	11.20	13.40	38	3.00	2.07	12.50	14.00	38	3.00	2.45	12.50	14.00	38	3.00	2.83	14.00	17.00	38	3.00	
1.70	11.20	13.40	38	3.00	2.08	12.50	14.00	38	3.00	2.46	12.50	14.00	38	3.00	2.84	14.00	17.00	38	3.00	
1.71	11.20	13.40	38	3.00	2.09	12.50	14.00	38	3.00	2.47	12.50	14.00	38	3.00	2.85	14.00	17.00	38	3.00	
1.72	11.20	13.40	38	3.00	2.10	12.50	14.00	38	3.00	2.48	12.50	14.00	38	3.00	2.86	14.00	17.00	38	3.00	
1.73	11.20	13.40	38	3.00	2.11	12.50	14.00	38	3.00	2.49	12.50	14.00	38	3.00	2.87	14.00	17.00	38	3.00	
1.74	11.20	13.40	38	3.00	2.12	12.50	14.00	38	3.00	2.50	14.00	17.00	38	3.00	2.88	14.00	17.00	38	3.00	
1.75	11.20	13.40	38	3.00	2.13	12.50	14.00	38	3.00	2.51	14.00	17.00	38	3.00	2.89	14.00	17.00	38	3.00	
1.76	11.20	13.40	38	3.00	2.14	12.50	14.00	38	3.00	2.52	14.00	17.00	38	3.00	2.90	14.00	17.00	38	3.00	
1.77	11.20	13.40	38	3.00	2.15	12.50	14.00	38	3.00	2.53	14.00	17.00	38	3.00	2.91	14.00	17.00	38	3.00	
1.78	11.20	13.40	38	3.00	2.16	12.50	14.00	38	3.00	2.54	14.00	17.00	38	3.00	2.92	14.00	17.00	38	3.00	
1.79	11.20	13.40	38	3.00	2.17	12.50	14.00	38	3.00	2.55	14.00	17.00	38	3.00	2.93	14.00	17.00	38	3.00	
1.80	11.20	13.40	38	3.00	2.18	12.50	14.00	38	3.00	2.56	14.00	17.00	38	3.00	2.94	14.00	17.00	38	3.00	
1.81	11.20	13.40	38	3.00	2.19	12.50	14.00	38	3.00	2.57	14.00	17.00	38	3.00	2.95	14.00	17.00	38	3.00	
1.82	11.20	13.40	38	3.00	2.20	12.50	14.00	38	3.00	2.58	14.00	17.00	38	3.00	2.96	14.00	17.00	38	3.00	
1.83	11.20	13.40	38	3.00	2.21	12.50	14.00	38	3.00	2.59	14.00	17.00	38	3.00	2.97	14.00	17.00	38	3.00	
1.84	11.20	13.40	38	3.00	2.22	12.50	14.00	38	3.00	2.60	14.00	17.00	38	3.00	2.98	14.00	17.00	38	3.00	
1.85	11.20	13.40	38	3.00	2.23	12.50	14.00	38	3.00	2.61	14.00	17.00	38	3.00	2.99	14.00	17.00	38	3.00	
1.86	11.20	13.40	38	3.00	2.24	12.50	14.00	38	3.00	2.62	14.00	17.00	38	3.00	3.00	14.00	17.00	38	3.00	
1.87	11.20	13.40	38	3.00	2.25	12.50	14.00	38	3.00	2.63	14.00	17.00	38	3.00						
1.88	11.20	13.40	38	3.00	2.26	12.50	14.00	38	3.00	2.64	14.00	17.00	38	3.00						
1.89	11.20	13.40	38	3.00	2.27	12.50	14.00	38	3.00	2.65	14.00	17.00	38	3.00						
1.90	11.20	13.40	38	3.00	2.28	12.50	14.00	38	3.00	2.66	14.00	17.00	38	3.00						
1.91	11.20	13.40	38	3.00	2.29	12.50	14.00	38	3.00	2.67	14.00	17.00	38	3.00						
1.92	11.20	13.40	38	3.00	2.30	12.50	14.00	38	3.00	2.68	14.00	17.00	38	3.00						

Mikrobohrer
Micro foret
Micro punta
Micro drill

Art. 51201

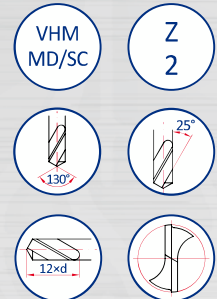
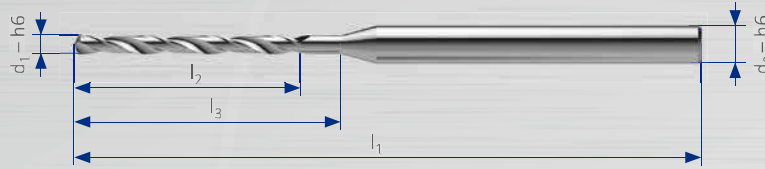


d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
0.20	1.50	1.80	38	3.00	0.58	3.60	4.50	38	3.00	0.96	6.50	8.00	38	3.00	1.34	9.20	11.20	38	3.00	
0.21	1.50	1.80	38	3.00	0.59	3.60	4.50	38	3.00	0.97	6.50	8.00	38	3.00	1.35	9.20	11.20	38	3.00	
0.22	1.50	1.80	38	3.00	0.60	3.60	4.50	38	3.00	0.98	6.50	8.00	38	3.00	1.36	9.20	11.20	38	3.00	
0.23	1.50	1.80	38	3.00	0.61	3.90	5.00	38	3.00	0.99	6.50	8.00	38	3.00	1.37	9.20	11.20	38	3.00	
0.24	1.50	1.80	38	3.00	0.62	3.90	5.00	38	3.00	1.00	6.50	8.00	38	3.00	1.38	9.20	11.20	38	3.00	
0.25	1.90	2.20	38	3.00	0.63	3.90	5.00	38	3.00	1.01	6.50	8.00	38	3.00	1.39	9.20	11.20	38	3.00	
0.26	1.90	2.20	38	3.00	0.64	3.90	5.00	38	3.00	1.02	6.50	8.00	38	3.00	1.40	9.20	11.20	38	3.00	
0.27	1.90	2.20	38	3.00	0.65	3.90	5.00	38	3.00	1.03	6.50	8.00	38	3.00	1.41	9.20	11.20	38	3.00	
0.28	1.90	2.20	38	3.00	0.66	3.90	5.00	38	3.00	1.04	6.50	8.00	38	3.00	1.42	9.20	11.20	38	3.00	
0.29	1.90	2.20	38	3.00	0.67	3.90	5.00	38	3.00	1.05	6.50	8.00	38	3.00	1.43	9.20	11.20	38	3.00	
0.30	1.80	2.40	38	3.00	0.68	4.50	5.60	38	3.00	1.06	7.30	9.00	38	3.00	1.44	9.20	11.20	38	3.00	
0.31	1.80	2.40	38	3.00	0.69	4.50	5.60	38	3.00	1.07	7.30	9.00	38	3.00	1.45	9.20	11.20	38	3.00	
0.32	1.80	2.40	38	3.00	0.70	4.50	5.60	38	3.00	1.08	7.30	9.00	38	3.00	1.46	9.20	11.20	38	3.00	
0.33	1.80	2.40	38	3.00	0.71	4.50	5.60	38	3.00	1.09	7.30	9.00	38	3.00	1.47	9.20	11.20	38	3.00	
0.34	1.80	2.40	38	3.00	0.72	4.50	5.60	38	3.00	1.10	7.30	9.00	38	3.00	1.48	9.20	11.20	38	3.00	
0.35	2.20	2.80	38	3.00	0.73	4.50	5.60	38	3.00	1.11	7.30	9.00	38	3.00	1.49	9.20	11.20	38	3.00	
0.36	2.20	2.80	38	3.00	0.74	4.50	5.60	38	3.00	1.12	7.30	9.00	38	3.00	1.50	9.20	11.20	38	3.00	
0.37	2.20	2.80	38	3.00	0.75	4.50	5.60	38	3.00	1.13	7.30	9.00	38	3.00	1.51	11.20	13.40	38	3.00	
0.38	2.20	2.80	38	3.00	0.76	5.00	6.30	38	3.00	1.14	7.30	9.00	38	3.00	1.52	11.20	13.40	38	3.00	
0.39	2.70	3.60	38	3.00	0.77	5.00	6.30	38	3.00	1.15	7.30	9.00	38	3.00	1.53	11.20	13.40	38	3.00	
0.40	2.70	3.60	38	3.00	0.78	5.00	6.30	38	3.00	1.16	8.20	10.00	38	3.00	1.54	11.20	13.40	38	3.00	
0.41	2.70	3.60	38	3.00	0.79	5.00	6.30	38	3.00	1.17	8.20	10.00	38	3.00	1.55	11.20	13.40	38	3.00	
0.42	2.70	3.60	38	3.00	0.80	5.00	6.30	38	3.00	1.18	8.20	10.00	38	3.00	1.56	11.20	13.40	38	3.00	
0.43	2.70	3.60	38	3.00	0.81	5.00	6.30	38	3.00	1.19	8.20	10.00	38	3.00	1.57	11.20	13.40	38	3.00	
0.44	2.70	3.60	38	3.00	0.82	5.00	6.30	38	3.00	1.20	8.20	10.00	38	3.00	1.58	11.20	13.40	38	3.00	
0.45	2.70	3.60	38	3.00	0.83	5.00	6.30	38	3.00	1.21	8.20	10.00	38	3.00	1.59	11.20	13.40	38	3.00	
0.46	2.70	3.60	38	3.00	0.84	5.00	6.30	38	3.00	1.22	8.20	10.00	38	3.00	1.60	11.20	13.40	38	3.00	
0.47	2.70	3.60	38	3.00	0.85	5.00	6.30	38	3.00	1.23	8.20	10.00	38	3.00	1.61	11.20	13.40	38	3.00	
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0.50	3.20	4.00	38	3.00	0.88	5.70	7.10	38	3.00	1.26	8.20	10.00	38	3.00	1.64	11.20	13.40	38	3.00	
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0.53	3.20	4.00	38	3.00	0.91	5.70	7.10	38	3.00	1.29	8.20	10.00	38	3.00	1.67	11.20	13.40	38	3.00	
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0.55	3.60	4.50	38	3.00	0.93	5.70	7.10	38	3.00	1.31	9.20	11.20	38	3.00	1.69	11.20	13.40	38	3.00	
0.56	3.60	4.50	38	3.00	0.94	5.70	7.10	38	3.00	1.32	9.20	11.20	38	3.00	1.70	11.20	13.40	38	3.00	
0.57	3.60	4.50	38	3.00	0.95	5.70	7.10	38	3.00	1.33	9.20	11.20	38	3.00	1.71	11.20	13.40	38	3.00	



Mikrobohrer
Micro foret
Micro punta
Micro drill

Art. 50621



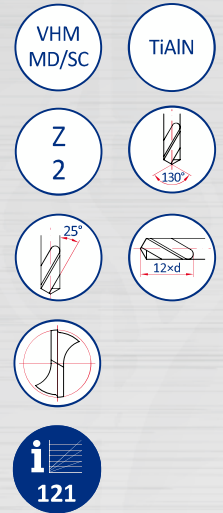
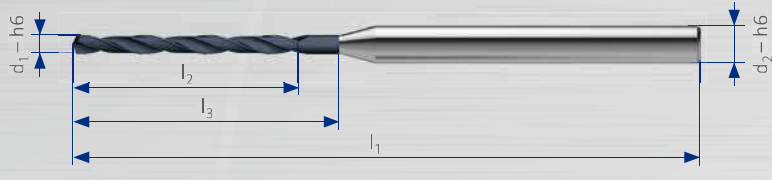
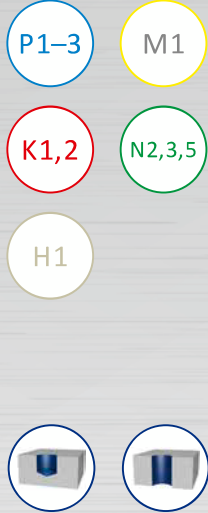
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mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
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0.20	2.40	3.50	38	3.00															
0.21	2.50	3.50	38	3.00															
0.22	2.70	3.50	38	3.00															
0.23	2.80	3.50	38	3.00															
0.24	2.90	4.00	38	3.00															
0.25	3.00	4.00	38	3.00															
0.26	3.10	4.00	38	3.00															
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0.31	3.70	4.50	38	3.00															
0.32	3.90	5.00	38	3.00															
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0.59	7.10	8.00	38	3.00															
0.60	7.20	9.00	38	3.00															
0.61	7.30	9.00	38	3.00															
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0.64	7.70	9.50	38	3.00															
0.65	7.80	9.50	38	3.00															
0.66	7.90	9.50	38	3.00															
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1.00	12.00	14.50	38	3.00															
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1.63	19.60	22.50	50	3.00															
1.64	19.70	22.50	50	3.00															
1.65	19.80	22.50	50	3.00															
1.66	19.90	23.00	50	3.00															



d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1.67	20.10	23.00	50	3.00	2.01	24.10	27.50	60	3.00	2.35	28.20	31.50	65	3.00	2.69	32.30	36.00	65	3.00	
1.68	20.20	23.00	50	3.00	2.02	24.20	27.50	60	3.00	2.36	28.30	31.50	65	3.00	2.70	32.40	36.50	65	3.00	
1.69	20.30	23.00	50	3.00	2.03	24.40	27.50	60	3.00	2.37	28.40	32.00	65	3.00	2.71	32.50	36.50	65	3.00	
1.70	20.40	23.50	50	3.00	2.04	24.50	27.50	60	3.00	2.38	28.60	32.00	65	3.00	2.72	32.60	36.50	65	3.00	
1.71	20.50	23.50	50	3.00	2.05	24.60	28.00	60	3.00	2.39	28.70	32.00	65	3.00	2.73	32.80	36.50	65	3.00	
1.72	20.70	23.50	50	3.00	2.06	24.70	28.00	60	3.00	2.40	28.80	32.00	65	3.00	2.74	32.90	37.00	65	3.00	
1.73	20.80	23.50	50	3.00	2.07	24.80	28.00	60	3.00	2.41	28.90	33.00	65	3.00	2.75	33.00	37.00	65	3.00	
1.74	20.90	24.00	50	3.00	2.08	25.00	28.00	60	3.00	2.42	29.00	33.00	65	3.00	2.76	33.10	37.00	65	3.00	
1.75	21.00	24.00	50	3.00	2.09	25.10	28.50	60	3.00	2.43	29.20	33.00	65	3.00	2.77	33.20	37.00	65	3.00	
1.76	21.10	24.00	50	3.00	2.10	25.20	28.50	60	3.00	2.44	29.30	33.00	65	3.00	2.78	33.40	37.50	65	3.00	
1.77	21.30	24.00	50	3.00	2.11	25.30	28.50	60	3.00	2.45	29.40	33.00	65	3.00	2.79	33.50	37.50	65	3.00	
1.78	21.40	24.50	50	3.00	2.12	25.40	28.50	60	3.00	2.46	29.50	33.50	65	3.00	2.80	33.60	37.50	65	3.00	
1.79	21.50	24.50	50	3.00	2.13	25.60	29.00	60	3.00	2.47	29.60	33.50	65	3.00	2.81	33.70	37.50	65	3.00	
1.80	21.60	25.00	50	3.00	2.14	25.70	29.00	60	3.00	2.48	29.80	33.50	65	3.00	2.82	33.80	38.00	65	3.00	
1.81	21.70	25.00	50	3.00	2.15	25.80	29.00	60	3.00	2.49	29.90	33.50	65	3.00	2.83	34.00	38.00	65	3.00	
1.82	21.90	25.00	50	3.00	2.16	25.90	29.00	60	3.00	2.50	30.00	34.00	65	3.00	2.84	34.10	38.00	65	3.00	
1.83	22.00	25.00	50	3.00	2.17	26.10	29.50	60	3.00	2.51	30.10	34.00	65	3.00	2.85	34.20	38.00	65	3.00	
1.84	22.10	25.50	50	3.00	2.18	26.20	29.50	60	3.00	2.52	30.20	34.00	65	3.00	2.86	34.30	38.50	65	3.00	
1.85	22.20	25.50	50	3.00	2.19	26.30	29.50	60	3.00	2.53	30.40	34.00	65	3.00	2.87	34.40	38.50	65	3.00	
1.86	22.30	25.50	50	3.00	2.20	26.40	29.50	60	3.00	2.54	30.50	34.50	65	3.00	2.88	34.60	38.50	65	3.00	
1.87	22.50	25.50	50	3.00	2.21	26.50	30.00	60	3.00	2.55	30.60	34.50	65	3.00	2.89	34.70	38.50	65	3.00	
1.88	22.60	26.00	50	3.00	2.22	26.70	30.00	60	3.00	2.56	30.70	34.50	65	3.00	2.90	34.80	39.00	65	3.00	
1.89	22.70	26.00	50	3.00	2.23	26.80	30.00	60	3.00	2.57	30.80	34.50	65	3.00	2.91	34.90	39.00	65	3.00	
1.90	22.80	26.00	50	3.00	2.24	26.90	30.00	60	3.00	2.58	31.00	35.00	65	3.00	2.92	35.00	39.00	65	3.00	
1.91	22.90	26.00	50	3.00	2.25	27.00	30.50	60	3.00	2.59	31.10	35.00	65	3.00	2.93	35.20	39.00	65	3.00	
1.92	23.10	26.50	50	3.00	2.26	27.10	30.50	60	3.00	2.60	31.20	35.00	65	3.00	2.94	35.30	39.50	65	3.00	
1.93	23.20	26.50	50	3.00	2.27	27.20	30.50	60	3.00	2.61	31.30	35.00	65	3.00	2.95	35.40	39.50	65	3.00	
1.94	23.30	26.50	50	3.00	2.28	27.40	30.50	60	3.00	2.62	31.40	35.50	65	3.00	2.96	35.50	39.50	65	3.00	
1.95	23.40	26.50	50	3.00	2.29	27.50	31.00	60	3.00	2.63	31.60	35.50	65	3.00	2.97	35.60	39.50	65	3.00	
1.96	23.50	27.00	50	3.00	2.30	27.60	31.00	60	3.00	2.64	31.70	35.50	65	3.00	2.98	35.80	40.00	65	3.00	
1.97	23.70	27.00	50	3.00	2.31	27.70	31.00	65	3.00	2.65	31.80	35.50	65	3.00	2.99	35.90	40.00	65	3.00	
1.98	23.80	27.00	50	3.00	2.32	27.80	31.00	65	3.00	2.66	31.90	36.00	65	3.00	3.00	36.00	40.00	65	3.00	
1.99	23.90	27.00	50	3.00	2.33	28.00	31.50	65	3.00	2.67	32.00	36.00	65	3.00						
2.00	24.00	27.00	50	3.00	2.34	28.10	31.50	65	3.00	2.68	32.20	36.00	65	3.00						

Mikrobohrer
Micro foret
Micro punta
Micro drill

Art. 50622



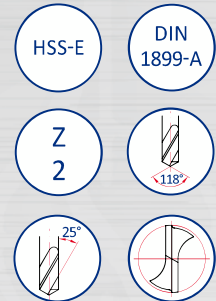
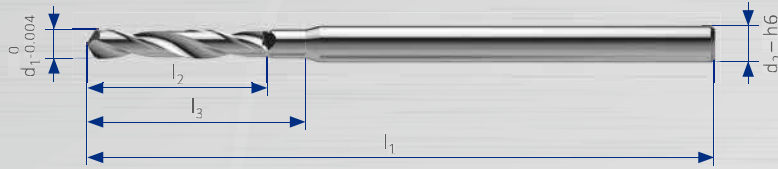
d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
0.20	2.40	3.50	38	3.00	0.58	7.00	8.00	38	3.00	0.96	11.50	13.50	38	3.00	1.34	16.10	18.50	50	3.00	
0.21	2.50	3.50	38	3.00	0.59	7.10	8.00	38	3.00	0.97	11.70	13.50	38	3.00	1.35	16.20	18.50	50	3.00	
0.22	2.70	3.50	38	3.00	0.60	7.20	9.00	38	3.00	0.98	11.80	13.50	38	3.00	1.36	16.30	19.00	50	3.00	
0.23	2.80	3.50	38	3.00	0.61	7.30	9.00	38	3.00	0.99	11.90	13.50	38	3.00	1.37	16.50	19.00	50	3.00	
0.24	2.90	4.00	38	3.00	0.62	7.50	9.00	38	3.00	1.00	12.00	14.50	38	3.00	1.38	16.60	19.00	50	3.00	
0.25	3.00	4.00	38	3.00	0.63	7.60	9.00	38	3.00	1.01	12.10	14.50	38	3.00	1.39	16.70	19.00	50	3.00	
0.26	3.10	4.00	38	3.00	0.64	7.70	9.50	38	3.00	1.02	12.30	14.50	38	3.00	1.40	16.80	19.50	50	3.00	
0.27	3.30	4.00	38	3.00	0.65	7.80	9.50	38	3.00	1.03	12.40	14.50	38	3.00	1.41	16.90	19.50	50	3.00	
0.28	3.40	4.50	38	3.00	0.66	7.90	9.50	38	3.00	1.04	12.50	15.00	38	3.00	1.42	17.10	19.50	50	3.00	
0.29	3.50	4.50	38	3.00	0.67	8.10	9.50	38	3.00	1.05	12.60	15.00	38	3.00	1.43	17.20	19.50	50	3.00	
0.30	3.60	4.50	38	3.00	0.68	8.20	10.00	38	3.00	1.06	12.70	15.00	38	3.00	1.44	17.30	20.00	50	3.00	
0.31	3.70	4.50	38	3.00	0.69	8.30	10.00	38	3.00	1.07	12.90	15.00	38	3.00	1.45	17.40	20.00	50	3.00	
0.32	3.90	5.00	38	3.00	0.70	8.40	10.00	38	3.00	1.08	13.00	15.50	38	3.00	1.46	17.50	20.00	50	3.00	
0.33	4.00	5.00	38	3.00	0.71	8.50	10.00	38	3.00	1.09	13.10	15.50	38	3.00	1.47	17.70	20.00	50	3.00	
0.34	4.10	5.00	38	3.00	0.72	8.70	10.50	38	3.00	1.10	13.20	15.50	38	3.00	1.48	17.80	20.50	50	3.00	
0.35	4.20	5.00	38	3.00	0.73	8.80	10.50	38	3.00	1.11	13.30	15.50	38	3.00	1.49	17.90	20.50	50	3.00	
0.36	4.30	5.50	38	3.00	0.74	8.90	10.50	38	3.00	1.12	13.50	16.00	38	3.00	1.50	18.00	21.00	50	3.00	
0.37	4.50	5.50	38	3.00	0.75	9.00	10.50	38	3.00	1.13	13.60	16.00	38	3.00	1.51	18.10	21.00	50	3.00	
0.38	4.60	5.50	38	3.00	0.76	9.10	11.00	38	3.00	1.14	13.70	16.00	38	3.00	1.52	18.30	21.00	50	3.00	
0.39	4.70	5.50	38	3.00	0.77	9.30	11.00	38	3.00	1.15	13.80	16.00	38	3.00	1.53	18.40	21.00	50	3.00	
0.40	4.80	6.00	38	3.00	0.78	9.40	11.00	38	3.00	1.16	13.90	16.50	38	3.00	1.54	18.50	21.50	50	3.00	
0.41	4.90	6.00	38	3.00	0.79	9.50	11.00	38	3.00	1.17	14.10	16.50	38	3.00	1.55	18.60	21.50	50	3.00	
0.42	5.10	6.00	38	3.00	0.80	9.60	11.50	38	3.00	1.18	14.20	16.50	38	3.00	1.56	18.70	21.50	50	3.00	
0.43	5.20	6.00	38	3.00	0.81	9.70	11.50	38	3.00	1.19	14.30	16.50	38	3.00	1.57	18.90	21.50	50	3.00	
0.44	5.30	6.50	38	3.00	0.82	9.90	11.50	38	3.00	1.20	14.40	17.00	38	3.00	1.58	19.00	22.00	50	3.00	
0.45	5.40	6.50	38	3.00	0.83	10.00	11.50	38	3.00	1.21	14.50	17.00	38	3.00	1.59	19.10	22.00	50	3.00	
0.46	5.50	6.50	38	3.00	0.84	10.10	12.00	38	3.00	1.22	14.70	17.00	38	3.00	1.60	19.20	22.00	50	3.00	
0.47	5.70	6.50	38	3.00	0.85	10.20	12.00	38	3.00	1.23	14.80	17.00	38	3.00	1.61	19.30	22.00	50	3.00	
0.48	5.80	7.00	38	3.00	0.86	10.30	12.00	38	3.00	1.24	14.90	17.50	38	3.00	1.62	19.40	22.50	50	3.00	
0.49	5.90	7.00	38	3.00	0.87	10.50	12.00	38	3.00	1.25	15.00	17.50	38	3.00	1.63	19.60	22.50	50	3.00	
0.50	6.00	7.00	38	3.00	0.88	10.60	12.50	38	3.00	1.26	15.10	17.50	50	3.00	1.64	19.70	22.50	50	3.00	
0.51	6.10	7.00	38	3.00	0.89	10.70	12.50	38	3.00	1.27	15.30	17.50	50	3.00	1.65	19.80	22.50	50	3.00	
0.52	6.30	7.50	38	3.00	0.90	10.80	12.50	38	3.00	1.28	15.40	18.00	50	3.00	1.66	19.90	23.00	50	3.00	
0.53	6.40	7.50	38	3.00	0.91	10.90	12.50	38	3.00	1.29	15.50	18.00	50	3.00	1.67	20.10	23.00	50	3.00	
0.54	6.50	7.50	38	3.00	0.92	11.10	13.00	38	3.00	1.30	15.60	18.00	50	3.00	1.68	20.20	23.00	50	3.00	
0.55	6.60	7.50	38	3.00	0.93	11.20	13.00	38	3.00	1.31	15.70	18.00	50	3.00	1.69	20.30	23.00	50	3.00	
0.56	6.70	8.00	38	3.00	0.94	11.30	13.00	38	3.00	1.32	15.90	18.50	50	3.00	1.70	20.40	23.50	50	3.00	
0.57	6.90	8.00	38	3.00	0.95	11.40	13.00	38	3.00	1.33	16.00	18.50	50	3.00	1.71	20.50	23.50	50	3.00	



d ₁ mm	l ₂ mm	l ₃ mm	l ₁ mm	d ₂ mm	d ₁ mm	l ₂ mm	l ₃ mm	l ₁ mm	d ₂ mm	d ₁ mm	l ₂ mm	l ₃ mm	l ₁ mm	d ₂ mm	d ₁ mm	l ₂ mm	l ₃ mm	l ₁ mm	d ₂ mm
1.72	20.70	23.50	50	3.00	2.06	24.70	28.00	60	3.00	2.40	28.80	32.00	65	3.00	2.74	32.90	37.00	65	3.00
1.73	20.80	23.50	50	3.00	2.07	24.80	28.00	60	3.00	2.41	28.90	33.00	65	3.00	2.75	33.00	37.00	65	3.00
1.74	20.90	24.00	50	3.00	2.08	25.00	28.00	60	3.00	2.42	29.00	33.00	65	3.00	2.76	33.10	37.00	65	3.00
1.75	21.00	24.00	50	3.00	2.09	25.10	28.50	60	3.00	2.43	29.20	33.00	65	3.00	2.77	33.20	37.00	65	3.00
1.76	21.10	24.00	50	3.00	2.10	25.20	28.50	60	3.00	2.44	29.30	33.00	65	3.00	2.78	33.40	37.50	65	3.00
1.77	21.30	24.00	50	3.00	2.11	24.40	28.50	60	3.00	2.45	29.40	33.00	65	3.00	2.79	33.50	37.50	65	3.00
1.78	21.40	24.50	50	3.00	2.12	25.40	28.50	60	3.00	2.46	29.50	33.50	65	3.00	2.80	33.60	37.50	65	3.00
1.79	21.50	24.50	50	3.00	2.13	25.60	29.00	60	3.00	2.47	29.60	33.50	65	3.00	2.81	33.70	37.50	65	3.00
1.80	21.60	25.00	50	3.00	2.14	25.70	29.00	60	3.00	2.48	29.80	33.50	65	3.00	2.82	33.80	38.00	65	3.00
1.81	21.70	25.00	50	3.00	2.15	25.80	29.00	60	3.00	2.49	29.90	33.50	65	3.00	2.83	34.00	38.00	65	3.00
1.82	21.90	25.00	50	3.00	2.16	25.90	29.00	60	3.00	2.50	30.00	34.00	65	3.00	2.84	34.10	38.00	65	3.00
1.83	22.00	25.00	50	3.00	2.17	26.10	29.50	60	3.00	2.51	30.10	34.00	65	3.00	2.85	34.20	38.00	65	3.00
1.84	22.10	25.50	50	3.00	2.18	26.20	29.50	60	3.00	2.52	30.20	34.00	65	3.00	2.86	34.30	38.50	65	3.00
1.85	22.20	25.50	50	3.00	2.19	26.30	29.50	60	3.00	2.53	30.40	34.00	65	3.00	2.87	34.40	38.50	65	3.00
1.86	22.30	25.50	50	3.00	2.20	26.40	29.50	60	3.00	2.54	30.50	34.50	65	3.00	2.88	34.60	38.50	65	3.00
1.87	22.50	25.50	50	3.00	2.21	26.50	30.00	60	3.00	2.55	30.60	34.50	65	3.00	2.89	34.70	38.50	65	3.00
1.88	22.60	26.00	50	3.00	2.22	26.70	30.00	60	3.00	2.56	30.70	34.50	65	3.00	2.90	34.80	39.00	65	3.00
1.89	22.70	26.00	50	3.00	2.23	26.80	30.00	60	3.00	2.57	30.80	34.50	65	3.00	2.91	34.90	39.00	65	3.00
1.90	22.80	26.00	50	3.00	2.24	26.90	30.00	60	3.00	2.58	31.00	35.00	65	3.00	2.92	35.00	39.00	65	3.00
1.91	22.90	26.00	50	3.00	2.25	27.00	30.50	60	3.00	2.59	31.10	35.00	65	3.00	2.93	35.20	39.00	65	3.00
1.92	23.10	26.50	50	3.00	2.26	27.10	30.50	60	3.00	2.60	31.20	35.00	65	3.00	2.94	35.30	39.50	65	3.00
1.93	23.20	26.50	50	3.00	2.27	27.20	30.50	60	3.00	2.61	31.30	35.00	65	3.00	2.95	35.40	39.50	65	3.00
1.94	23.30	26.50	50	3.00	2.28	27.40	30.50	60	3.00	2.62	31.40	35.50	65	3.00	2.96	35.50	39.50	65	3.00
1.95	23.40	26.50	50	3.00	2.29	27.50	31.00	60	3.00	2.63	31.60	35.50	65	3.00	2.97	35.60	39.50	65	3.00
1.96	23.50	27.00	50	3.00	2.30	27.60	31.00	60	3.00	2.64	31.70	35.50	65	3.00	2.98	35.80	40.00	65	3.00
1.97	23.70	27.00	50	3.00	2.31	27.70	31.00	65	3.00	2.65	31.80	35.50	65	3.00	2.99	35.90	40.00	65	3.00
1.98	23.80	27.00	50	3.00	2.32	27.80	31.00	65	3.00	2.66	31.90	36.00	65	3.00	3.00	36.00	40.00	65	3.00
1.99	23.90	27.00	50	3.00	2.33	28.00	31.50	65	3.00	2.67	32.00	36.00	65	3.00					
2.00	24.00	27.00	50	3.00	2.34	28.10	31.50	65	3.00	2.68	32.20	36.00	65	3.00					
2.01	24.10	27.50	60	3.00	2.35	28.20	31.50	65	3.00	2.69	32.30	36.00	65	3.00					
2.02	24.20	27.50	60	3.00	2.36	28.30	31.50	65	3.00	2.70	32.40	36.50	65	3.00					
2.03	24.40	27.50	60	3.00	2.37	28.40	32.00	65	3.00	2.71	32.50	36.50	65	3.00					
2.04	24.50	27.50	60	3.00	2.38	28.60	32.00	65	3.00	2.72	32.60	36.50	65	3.00					
2.05	24.60	28.00	60	3.00	2.39	28.70	32.00	65	3.00	2.73	32.80	36.50	65	3.00					

Mikrobohrer Spirec
Micro foret Spirec
Micro punta Spirec
Micro drill Spirec

Art. 12604

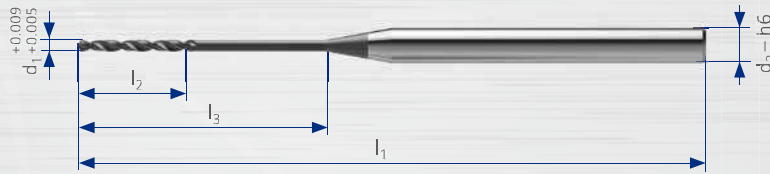


d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
0.05	0.40	0.60	25	1.00	0.43	2.70	3.60	25	1.00	0.81	5.00	6.30	25	1.50	1.90	11.70	14.00	38	2.00	
0.06	0.40	0.60	25	1.00	0.44	2.70	3.60	25	1.00	0.82	5.00	6.30	25	1.50	1.95	11.70	14.00	38	2.00	
0.07	0.50	0.70	25	1.00	0.45	2.70	3.60	25	1.00	0.83	5.00	6.30	25	1.50	1.984	11.70	14.00	38	2.00	
0.08	0.50	0.70	25	1.00	0.46	2.70	3.60	25	1.00	0.84	5.00	6.30	25	1.50	2.00	12.70	15.00	43	2.50	
0.09	0.50	0.70	25	1.00	0.47	2.70	3.60	25	1.00	0.85	5.00	6.30	25	1.50	2.05	12.70	15.00	43	2.50	
0.10	0.50	0.70	25	1.00	0.48	2.70	3.60	25	1.00	0.86	5.70	7.10	25	1.50	2.10	12.70	15.00	43	2.50	
0.11	0.50	0.70	25	1.00	0.49	3.20	4.00	25	1.00	0.87	5.70	7.10	25	1.50	2.15	12.70	15.00	43	2.50	
0.12	0.50	0.70	25	1.00	0.50	3.20	4.00	25	1.00	0.88	5.70	7.10	25	1.50	2.20	13.70	17.00	43	2.50	
0.13	0.80	1.00	25	1.00	0.51	3.20	4.00	25	1.00	0.89	5.70	7.10	25	1.50	2.25	13.70	17.00	43	2.50	
0.14	0.80	1.00	25	1.00	0.52	3.20	4.00	25	1.00	0.90	5.70	7.10	25	1.50	2.30	13.70	17.00	43	2.50	
0.15	0.80	1.00	25	1.00	0.53	3.20	4.00	25	1.00	0.91	5.70	7.10	25	1.50	2.35	13.70	17.00	43	2.50	
0.16	1.10	1.40	25	1.00	0.54	3.60	4.50	25	1.00	0.92	5.70	7.10	25	1.50	2.381	13.70	17.00	43	2.50	
0.17	1.10	1.40	25	1.00	0.55	3.60	4.50	25	1.00	0.93	5.70	7.10	25	1.50	2.40	14.70	18.00	43	2.50	
0.18	1.10	1.40	25	1.00	0.56	3.60	4.50	25	1.00	0.94	5.70	7.10	25	1.50	2.45	14.70	18.00	43	2.50	
0.19	1.10	1.40	25	1.00	0.57	3.60	4.50	25	1.00	0.95	5.70	7.10	25	1.50	2.50	14.70	18.00	46	3.00	
0.20	1.50	1.80	25	1.00	0.58	3.60	4.50	25	1.00	0.96	6.50	8.00	25	1.50	2.55	15.70	19.00	46	3.00	
0.21	1.50	1.80	25	1.00	0.59	3.60	4.50	25	1.00	0.97	6.50	8.00	25	1.50	2.60	15.70	19.00	46	3.00	
0.22	1.50	1.80	25	1.00	0.60	3.60	4.50	25	1.00	0.98	6.50	8.00	25	1.50	2.65	16.70	20.00	46	3.00	
0.23	1.50	1.80	25	1.00	0.61	3.90	5.00	25	1.00	0.99	6.50	8.00	25	1.50	2.70	16.70	20.00	46	3.00	
0.24	1.50	1.80	25	1.00	0.62	3.90	5.00	25	1.00	1.00	6.50	8.00	25	1.50	2.75	17.70	21.00	46	3.00	
0.25	1.90	2.20	25	1.00	0.63	3.90	5.00	25	1.00	1.05	6.50	8.00	25	1.50	2.778	17.70	21.00	46	3.00	
0.26	1.90	2.20	25	1.00	0.64	3.90	5.00	25	1.00	1.10	7.30	9.00	25	1.50	2.80	17.70	21.00	46	3.00	
0.27	1.90	2.20	25	1.00	0.65	3.90	5.00	25	1.00	1.15	7.30	9.00	25	1.50	2.85	18.70	22.00	46	3.00	
0.28	1.90	2.20	25	1.00	0.66	3.90	5.00	25	1.00	1.20	8.20	10.00	25	1.50	2.90	18.70	22.00	46	3.00	
0.29	1.90	2.20	25	1.00	0.67	3.90	5.00	25	1.00	1.25	8.20	10.00	25	1.50	2.95	19.70	23.00	46	3.00	
0.30	1.90	2.20	25	1.00	0.68	4.50	5.60	25	1.00	1.30	8.20	10.00	25	1.50	3.00	19.70	23.00	46	3.00	
0.31	2.40	2.80	25	1.00	0.69	4.50	5.60	25	1.00	1.35	9.20	11.20	25	1.50	3.175	19.70	23.00	46	3.175	
0.32	2.40	2.80	25	1.00	0.70	4.50	5.60	25	1.00	1.40	9.20	11.20	25	1.50						
0.33	2.40	2.80	25	1.00	0.71	4.50	5.60	25	1.00	1.45	9.20	11.20	25	1.50						
0.34	2.40	2.80	25	1.00	0.72	4.50	5.60	25	1.00	1.50	10.90	12.90	38	2.00						
0.35	2.40	2.80	25	1.00	0.73	4.50	5.60	25	1.00	1.55	11.20	13.40	38	2.00						
0.36	2.40	2.80	25	1.00	0.74	4.50	5.60	25	1.00	1.587	11.20	13.40	38	2.00						
0.37	2.40	2.80	25	1.00	0.75	4.50	5.60	25	1.00	1.60	11.20	13.40	38	2.00						
0.38	2.40	2.80	25	1.00	0.76	5.00	6.30	25	1.00	1.65	11.20	13.40	38	2.00						
0.39	2.70	3.60	25	1.00	0.77	5.00	6.30	25	1.00	1.70	11.20	13.40	38	2.00						
0.40	2.70	3.60	25	1.00	0.78	5.00	6.30	25	1.00	1.75	11.20	13.40	38	2.00						
0.41	2.70	3.60	25	1.00	0.79	5.00	6.30	25	1.00	1.80	11.20	13.40	38	2.00						
0.42	2.70	3.60	25	1.00	0.80	5.00	6.30	25	1.50	1.85	11.20	13.40	38	2.00						

Mikro-Tieflochbohrer
Micro foret de perçage profond
Micro punta per foro profondo
Micro deep hole drill

Art. 50720

- P1-3
- M1,2
- K1,2
- N1-6
- S1
- O1



- VHM MD/SC
- d_1
+ 0.009
+ 0.005
- Mi-Nova
- Z
2
- 129°
- 30°
- 10×d
- 20×d
-
-
- i
122
- i
150

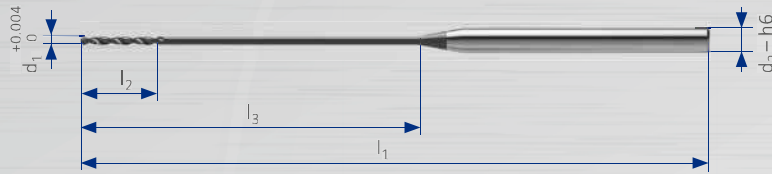


d_1	l_2	l_3	l_1	d_2
mm	mm	mm	mm	mm
0.20	2.50	4.00	38	3.00
0.25	3.00	5.00	38	3.00
0.30	3.50	6.00	38	3.00
0.35	4.00	7.00	38	3.00
0.40	4.50	8.00	38	3.00
0.45	5.00	9.00	38	3.00
0.50	5.50	10.00	50	3.00
0.55	6.00	11.00	50	3.00
0.60	6.50	12.00	50	3.00
0.65	7.00	13.00	50	3.00
0.70	7.50	14.00	50	3.00
0.75	8.00	15.00	50	3.00
0.80	8.50	16.00	55	3.00
0.85	9.00	17.00	55	3.00
0.90	9.50	18.00	55	3.00
0.95	10.00	19.00	55	3.00
1.00	10.50	20.00	55	3.00
1.05	11.00	21.00	60	3.00
1.10	11.50	22.00	60	3.00
1.15	12.00	23.00	60	3.00
1.20	12.50	24.00	60	3.00
1.25	13.00	25.00	60	3.00
1.30	13.50	26.00	65	3.00
1.35	14.00	27.00	65	3.00
1.40	14.50	28.00	65	3.00
1.45	15.00	29.00	65	3.00
1.50	15.50	30.00	65	3.00
1.55	16.00	31.00	72	3.00
1.60	16.50	32.00	72	3.00
1.65	17.00	33.00	72	3.00
1.70	17.50	34.00	72	3.00
1.75	18.00	35.00	78	3.00
1.80	18.50	36.00	78	3.00
1.85	19.00	37.00	78	3.00
1.90	19.50	38.00	78	3.00
1.95	20.00	39.00	78	3.00
2.00	20.50	40.00	78	3.00

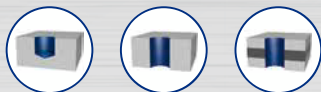
Mikro-Tieflochbohrer
Micro foret de perçage profond
Micro punta per foro profondo
Micro deep hole drill

Art. 50740

- P1-3 M1,2
- K1,2 N1-6
- S1 O1



- VHM
MD/SC d_1
+0.004
0
- Mi-
Nova Z
2
-
-
-
-

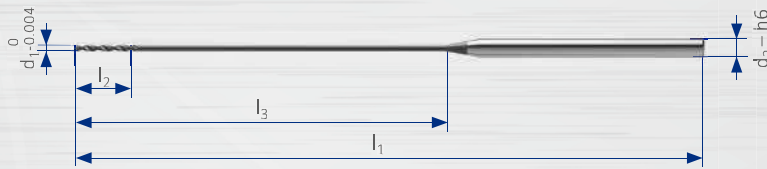


d_1	l_2	l_3	l_1	d_2
mm	mm	mm	mm	mm
0.40	4.50	16.00	50	3.00
0.45	5.00	18.00	50	3.00
0.50	5.50	20.00	70	3.00
0.55	6.00	22.00	70	3.00
0.60	6.50	24.00	70	3.00
0.65	7.00	26.00	70	3.00
0.70	7.50	28.00	70	3.00
0.75	8.00	30.00	70	3.00
0.80	8.50	32.00	78	3.00
0.85	9.00	34.00	78	3.00
0.90	9.50	36.00	78	3.00
0.95	10.00	38.00	78	3.00
1.00	10.50	40.00	78	3.00
1.05	11.00	42.00	88	3.00
1.10	11.50	44.00	88	3.00
1.15	12.00	46.00	88	3.00
1.20	12.50	48.00	88	3.00
1.25	13.00	50.00	88	3.00
1.30	13.50	52.00	98	3.00
1.35	14.00	54.00	98	3.00
1.40	14.50	56.00	98	3.00
1.45	15.00	58.00	98	3.00
1.50	15.50	60.00	98	3.00

Mikro-Tieflochbohrer
Micro foret de perçage profond
Micro punta per foro profondo
Micro deep hole drill

Art. 50760

- P1-3
- M1,2
- K1,2
- N1-6
- S1
- O1



- VHM MD/SC
- Mi-Nova
- Z 2
- 126°
- 30°
- 10xd
- 60xd
- i 122
- i 151



d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
0.40	4.50	24.00	60	3.00
0.45	5.00	27.00	60	3.00
0.50	5.50	30.00	85	3.00
0.55	6.00	33.00	85	3.00
0.60	6.50	36.00	85	3.00
0.65	7.00	39.00	85	3.00
0.70	7.50	42.00	85	3.00
0.75	8.00	45.00	85	3.00
0.80	8.50	48.00	100	3.00
0.85	9.00	51.00	100	3.00
0.90	9.50	54.00	100	3.00
0.95	10.00	57.00	100	3.00
1.00	10.50	60.00	100	3.00
1.05	11.00	63.00	115	3.00
1.10	11.50	66.00	115	3.00
1.15	12.00	69.00	115	3.00
1.20	12.50	72.00	115	3.00
1.25	13.00	75.00	115	3.00
1.30	13.50	78.00	130	3.00
1.35	14.00	81.00	130	3.00
1.40	14.50	84.00	130	3.00
1.45	15.00	87.00	130	3.00
1.50	15.50	90.00	130	3.00

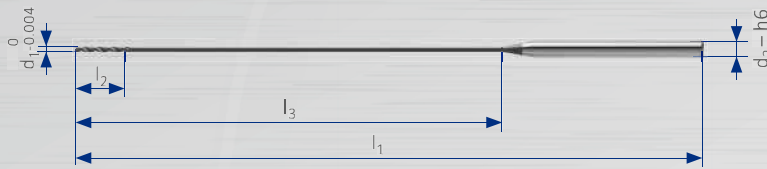
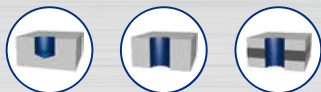
Mikro-Tieflochbohrer
Micro foret de perçage profond
Micro punta per foro profondo
Micro deep hole drill

Art. 50780

P1-3 M1,2

K1,2 N1-6

S1 O1



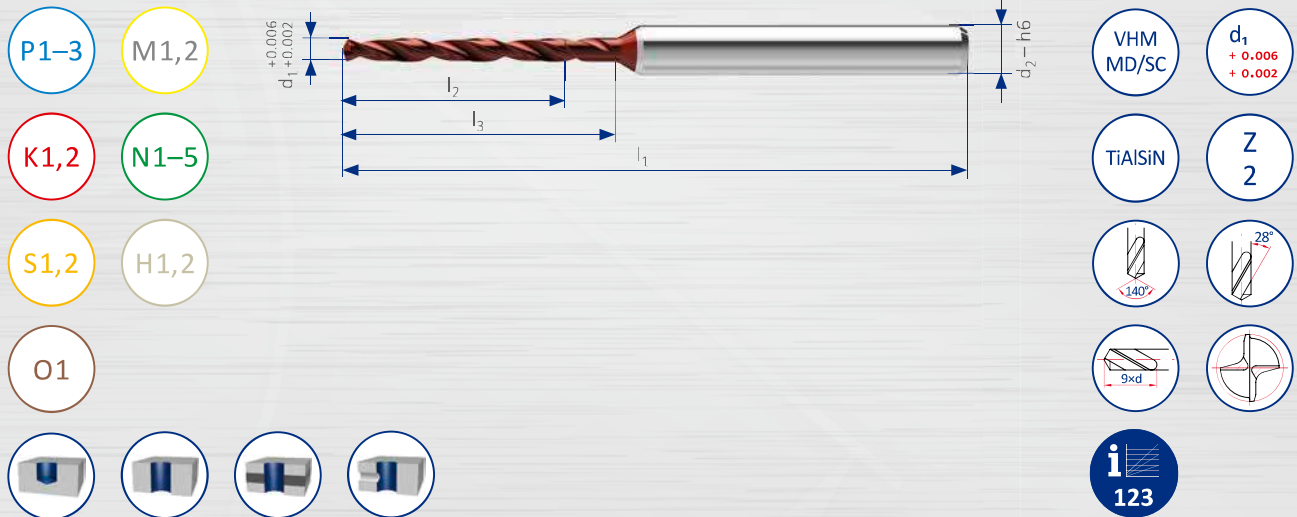
VHM MD/SC Mi-Nova

Z 2

d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
0.40	4.50	32.00	70	3.00
0.45	5.00	36.00	70	3.00
0.50	5.50	40.00	100	3.00
0.55	6.00	44.00	100	3.00
0.60	6.50	48.00	100	3.00
0.65	7.00	52.00	100	3.00
0.70	7.50	56.00	100	3.00
0.75	8.00	60.00	100	3.00
0.80	8.50	64.00	120	3.00
0.85	9.00	68.00	120	3.00
0.90	9.50	72.00	120	3.00
0.95	10.00	76.00	120	3.00
1.00	10.50	80.00	120	3.00
1.05	11.00	84.00	140	3.00
1.10	11.50	88.00	140	3.00
1.15	12.00	92.00	140	3.00
1.20	12.50	96.00	140	3.00
1.25	13.00	100.00	140	3.00
1.30	13.50	104.00	160	3.00
1.35	14.00	108.00	160	3.00
1.40	14.50	112.00	160	3.00
1.45	15.00	116.00	160	3.00
1.50	15.50	120.00	160	3.00

Hochleistungsbohrer Nirox
Foret à grand rendement Nirox
Punta ad alto rendimento Nirox
High performance drill Nirox

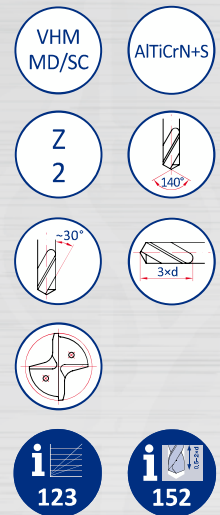
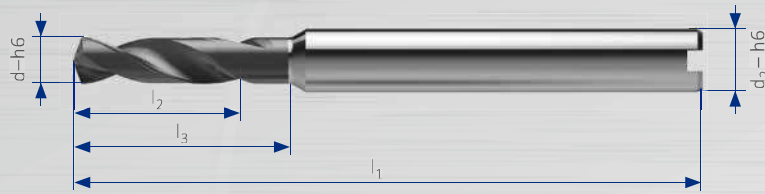
Art. 51609



d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
0.30	2.70	3.30	38	3.00	2.20	19.80	24.20	50	3.00
0.35	3.20	3.90	38	3.00	2.25	20.30	24.80	50	3.00
0.40	3.60	4.40	38	3.00	2.30	20.70	25.30	50	3.00
0.45	4.10	5.00	38	3.00	2.35	21.20	25.90	50	3.00
0.50	4.50	5.50	38	3.00	2.40	21.60	26.40	50	3.00
0.55	5.00	6.10	38	3.00	2.45	22.10	27.00	50	3.00
0.60	5.40	6.60	38	3.00	2.50	22.50	27.50	55	3.00
0.65	5.90	7.20	38	3.00	2.55	23.00	28.10	55	3.00
0.70	6.30	7.70	38	3.00	2.60	23.40	28.60	55	3.00
0.75	6.80	8.30	38	3.00	2.65	23.90	29.20	55	3.00
0.80	7.20	8.80	38	3.00	2.70	24.30	29.70	55	3.00
0.85	7.70	9.40	38	3.00	2.75	24.80	30.30	55	3.00
0.90	8.10	9.90	38	3.00	2.80	25.20	30.80	55	3.00
0.95	8.60	10.50	38	3.00	2.85	25.70	31.40	55	3.00
1.00	9.00	11.00	38	3.00	2.90	26.10	31.90	55	3.00
1.05	9.50	11.60	38	3.00	2.95	26.60	32.50	55	3.00
1.10	9.90	12.10	38	3.00	3.00	27.00	33.00	55	3.00
1.15	10.40	12.70	38	3.00					
1.20	10.80	13.20	38	3.00					
1.25	11.30	13.80	38	3.00					
1.30	11.70	14.30	38	3.00					
1.35	12.20	14.90	38	3.00					
1.40	12.60	15.40	38	3.00					
1.45	13.10	16.00	38	3.00					
1.50	13.50	16.50	38	3.00					
1.55	14.00	17.10	50	3.00					
1.60	14.40	17.60	50	3.00					
1.65	14.90	18.20	50	3.00					
1.70	15.30	18.70	50	3.00					
1.75	15.80	19.30	50	3.00					
1.80	16.20	19.80	50	3.00					
1.85	16.70	20.40	50	3.00					
1.90	17.10	20.90	50	3.00					
1.95	17.60	21.50	50	3.00					
2.00	18.00	22.00	50	3.00					
2.05	18.50	22.60	50	3.00					
2.10	18.90	23.10	50	3.00					
2.15	19.40	23.70	50	3.00					

Hochleistungsbohrer Phoenix TC2
Foret à grand rendement Phoenix TC2
Punta ad alto rendimento Phoenix TC2
High performance drill Phoenix TC2

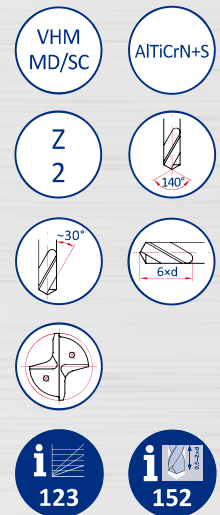
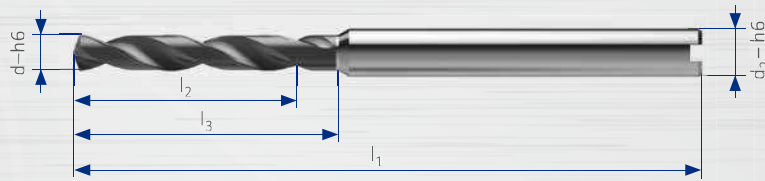
Art. 52903



d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1.00	3.00	5.00	38	3.00	2.90	8.70	12.00	50	3.00	4.80	14.40	22.50	60	6.00	7.40	22.20	32.00	72	8.00
1.05	3.15	5.25	38	3.00	2.95	8.85	12.00	50	3.00	4.85	14.55	22.50	60	6.00	7.50	22.50	32.50	72	8.00
1.10	3.30	5.50	38	3.00	3.00	9.00	12.50	50	3.00	4.90	14.70	22.50	60	6.00	7.60	22.80	32.50	72	8.00
1.15	3.45	5.50	38	3.00	3.05	9.15	12.50	55	6.00	4.95	14.85	23.00	60	6.00	7.70	23.10	33.50	72	8.00
1.20	3.60	5.50	38	3.00	3.10	9.30	13.50	55	6.00	5.00	15.00	23.00	60	6.00	7.80	23.40	33.50	72	8.00
1.25	3.75	6.00	38	3.00	3.15	9.45	13.50	55	6.00	5.05	15.15	23.00	64	6.00	7.90	23.70	34.00	72	8.00
1.30	3.90	6.00	38	3.00	3.20	9.60	13.50	55	6.00	5.10	15.30	23.50	64	6.00	8.00	24.00	34.00	72	8.00
1.35	4.05	6.00	38	3.00	3.25	9.75	13.50	55	6.00	5.15	15.45	23.50	64	6.00	8.50	25.50	36.50	79	10.00
1.40	4.20	6.50	38	3.00	3.30	9.90	13.50	55	6.00	5.20	15.60	23.50	64	6.00	9.00	27.00	38.00	79	10.00
1.45	4.35	6.50	38	3.00	3.35	10.05	14.00	55	6.00	5.25	15.75	23.50	64	6.00	9.50	28.50	40.00	85	10.00
1.50	4.50	6.50	38	3.00	3.40	10.20	14.00	55	6.00	5.30	15.90	24.00	64	6.00	10.00	30.00	42.00	85	10.00
1.55	4.65	7.50	38	3.00	3.45	10.35	14.00	55	6.00	5.35	16.05	24.00	64	6.00					
1.60	4.80	7.50	38	3.00	3.50	10.50	14.50	55	6.00	5.40	16.20	24.00	64	6.00					
1.65	4.95	8.00	38	3.00	3.55	10.65	14.50	55	6.00	5.45	16.35	24.00	64	6.00					
1.70	5.10	8.00	38	3.00	3.60	10.80	15.00	55	6.00	5.50	16.50	24.50	64	6.00					
1.75	5.25	8.00	38	3.00	3.65	10.95	15.00	55	6.00	5.55	16.65	24.50	64	6.00					
1.80	5.40	8.50	38	3.00	3.70	11.10	15.00	55	6.00	5.60	16.80	24.50	64	6.00					
1.85	5.55	8.50	38	3.00	3.75	11.25	15.00	55	6.00	5.65	16.95	24.50	64	6.00					
1.90	5.70	8.50	38	3.00	3.80	11.40	15.50	55	6.00	5.70	17.10	25.50	64	6.00					
1.95	5.85	9.00	38	3.00	3.85	11.55	15.50	55	6.00	5.75	17.25	25.50	64	6.00					
2.00	6.00	9.00	38	3.00	3.90	11.70	15.50	55	6.00	5.80	17.40	25.50	64	6.00					
2.05	6.15	9.00	38	3.00	3.95	11.85	15.50	55	6.00	5.85	17.55	25.50	64	6.00					
2.10	6.30	9.50	38	3.00	4.00	12.00	15.50	55	6.00	5.90	17.70	26.00	64	6.00					
2.15	6.45	9.50	38	3.00	4.05	12.15	16.50	60	6.00	5.95	17.85	26.00	64	6.00					
2.20	6.60	9.50	38	3.00	4.10	12.30	18.50	60	6.00	6.00	18.00	27.00	64	6.00					
2.25	6.75	10.00	38	3.00	4.15	12.45	18.50	60	6.00	6.10	18.30	27.50	68	8.00					
2.30	6.90	10.00	38	3.00	4.20	12.60	18.50	60	6.00	6.20	18.60	27.50	68	8.00					
2.35	7.05	10.00	38	3.00	4.25	12.75	18.50	60	6.00	6.30	18.90	28.00	68	8.00					
2.40	7.20	10.00	38	3.00	4.30	12.90	19.00	60	6.00	6.40	19.20	28.00	68	8.00					
2.45	7.35	10.00	38	3.00	4.35	13.05	19.00	60	6.00	6.50	19.50	28.50	68	8.00					
2.50	7.50	10.50	50	3.00	4.40	13.20	19.00	60	6.00	6.60	19.80	29.00	68	8.00					
2.55	7.65	11.00	50	3.00	4.45	13.35	20.50	60	6.00	6.70	20.10	29.50	68	8.00					
2.60	7.80	11.00	50	3.00	4.50	13.50	20.50	60	6.00	6.80	20.40	29.50	68	8.00					
2.65	7.95	11.00	50	3.00	4.55	13.65	20.50	60	6.00	6.90	20.70	30.00	68	8.00					
2.70	8.10	11.50	50	3.00	4.60	13.80	22.00	60	6.00	7.00	21.00	31.00	68	8.00					
2.75	8.25	11.50	50	3.00	4.65	13.95	22.00	60	6.00	7.10	21.30	31.50	72	8.00					
2.80	8.40	11.50	50	3.00	4.70	14.10	22.00	60	6.00	7.20	21.60	31.50	72	8.00					
2.85	8.55	12.00	50	3.00	4.75	14.25	22.00	60	6.00	7.30	21.90	32.00	72	8.00					

Hochleistungsbohrer Phoenix TC2
Foret à grand rendement Phoenix TC2
Punta ad alto rendimento Phoenix TC2
High performance drill Phoenix TC2

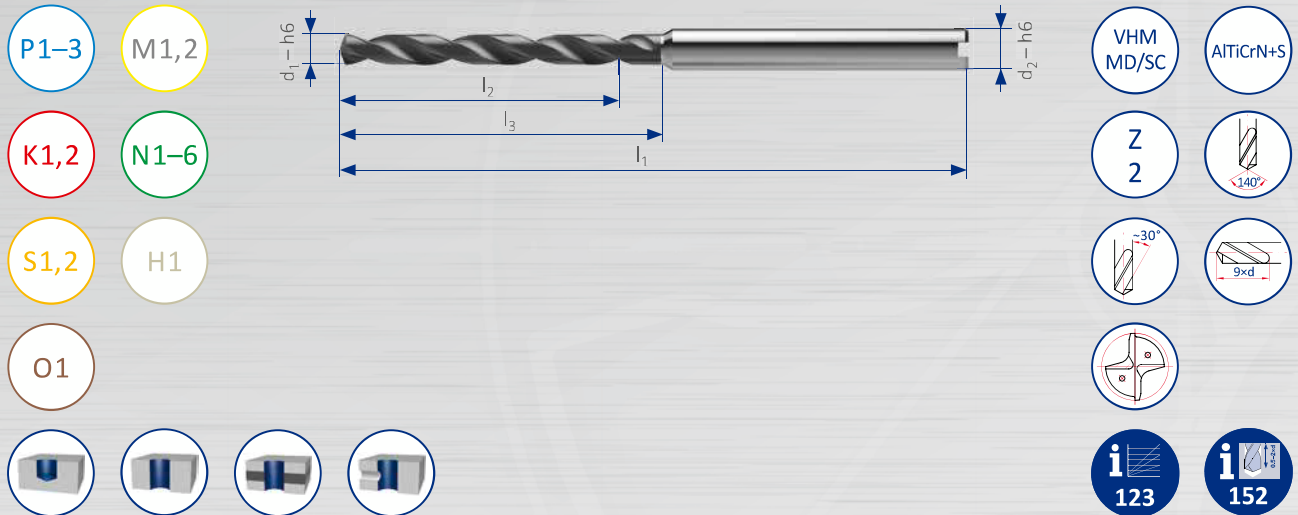
Art. 52906



d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1.00	6.00	8.00	38	3.00	2.90	17.40	20.40	50	3.00	4.63	27.90	36.00	79	6.00	6.50	39.00	48.00	89	8.00
1.05	6.30	8.30	38	3.00	2.95	17.70	20.70	50	3.00	4.65	27.90	36.00	79	6.00	6.60	39.60	48.50	89	8.00
1.10	6.60	8.60	38	3.00	3.00	18.00	21.00	50	3.00	4.67	28.10	36.00	79	6.00	6.70	40.20	49.00	89	8.00
1.15	6.90	8.90	38	3.00	3.05	18.30	22.30	66	6.00	4.69	28.20	36.00	79	6.00	6.80	40.80	50.00	89	8.00
1.20	7.20	9.20	38	3.00	3.10	18.60	22.60	66	6.00	4.70	28.20	36.00	79	6.00	6.90	41.40	50.50	89	8.00
1.25	7.50	9.50	38	3.00	3.15	18.90	22.90	66	6.00	4.75	28.50	37.00	79	6.00	7.00	42.00	52.00	89	8.00
1.30	7.80	9.80	38	3.00	3.20	19.20	23.20	66	6.00	4.80	28.80	37.00	79	6.00	7.10	42.60	52.50	95	8.00
1.35	8.10	10.10	38	3.00	3.25	19.50	23.50	66	6.00	4.85	29.10	37.50	79	6.00	7.20	43.20	53.50	95	8.00
1.40	8.40	10.40	38	3.00	3.30	19.80	23.80	66	6.00	4.90	29.40	37.50	79	6.00	7.30	43.80	54.00	95	8.00
1.45	8.70	10.70	38	3.00	3.35	20.10	24.10	66	6.00	4.95	29.70	38.00	79	6.00	7.40	44.40	54.50	95	8.00
1.50	9.00	11.00	38	3.00	3.40	20.40	24.40	66	6.00	5.00	30.00	38.00	79	6.00	7.50	45.00	55.00	95	8.00
1.55	9.30	11.30	38	3.00	3.45	20.70	24.70	66	6.00	5.05	30.30	38.50	79	6.00	7.60	45.60	55.50	95	8.00
1.60	9.60	12.60	38	3.00	3.50	21.00	25.00	66	6.00	5.10	30.60	38.50	79	6.00	7.70	46.20	56.00	95	8.00
1.65	9.90	12.90	38	3.00	3.55	21.30	25.30	66	6.00	5.15	30.90	39.00	79	6.00	7.80	46.80	57.00	95	8.00
1.70	10.20	13.20	38	3.00	3.60	21.60	25.60	66	6.00	5.20	31.20	39.00	79	6.00	7.90	47.40	57.50	95	8.00
1.75	10.50	13.50	38	3.00	3.65	21.90	25.90	66	6.00	5.25	31.50	40.00	79	6.00	8.00	48.00	58.00	95	8.00
1.80	10.80	13.80	38	3.00	3.68	22.20	26.20	66	6.00	5.30	31.80	40.00	79	6.00	8.50	51.00	62.00	106	10.00
1.85	11.10	14.10	38	3.00	3.70	22.20	26.20	66	6.00	5.35	32.10	40.50	79	6.00	9.00	54.00	65.00	106	10.00
1.90	11.40	14.40	38	3.00	3.72	22.40	26.40	66	6.00	5.40	32.40	40.50	79	6.00	9.50	57.00	68.00	113	10.00
1.95	11.70	14.70	38	3.00	3.74	22.50	26.50	66	6.00	5.45	32.70	41.00	79	6.00	10.00	60.00	72.00	113	10.00
2.00	12.00	15.00	50	3.00	3.75	22.50	26.50	66	6.00	5.50	33.00	41.00	79	6.00					
2.05	12.30	15.30	50	3.00	3.80	22.80	26.80	66	6.00	5.53	33.30	41.50	81	6.00					
2.10	12.60	15.60	50	3.00	3.85	23.10	27.10	66	6.00	5.55	33.30	41.50	81	6.00					
2.15	12.90	15.90	50	3.00	3.90	23.40	27.40	66	6.00	5.57	33.50	41.50	81	6.00					
2.20	13.20	16.20	50	3.00	3.95	23.70	27.70	66	6.00	5.59	33.60	41.50	81	6.00					
2.25	13.50	16.50	50	3.00	4.00	24.00	28.00	66	6.00	5.60	33.60	41.50	81	6.00					
2.30	13.80	16.80	50	3.00	4.05	24.30	30.20	79	6.00	5.65	33.90	42.00	81	6.00					
2.35	14.10	17.10	50	3.00	4.10	24.60	30.50	79	6.00	5.70	34.20	42.00	81	6.00					
2.40	14.40	17.40	50	3.00	4.15	24.90	30.80	79	6.00	5.75	34.50	43.00	81	6.00					
2.45	14.70	17.70	50	3.00	4.20	25.20	31.00	79	6.00	5.80	34.80	43.00	81	6.00					
2.50	15.00	18.00	50	3.00	4.25	25.50	31.50	79	6.00	5.85	35.10	43.50	81	6.00					
2.55	15.30	18.30	50	3.00	4.30	25.80	32.00	79	6.00	5.90	35.40	43.50	81	6.00					
2.60	15.60	18.60	50	3.00	4.35	26.10	32.50	79	6.00	5.95	35.70	44.00	81	6.00					
2.65	15.90	18.90	50	3.00	4.40	26.40	32.50	79	6.00	6.00	36.00	44.00	81	6.00					
2.70	16.20	19.20	50	3.00	4.45	26.70	33.00	79	6.00	6.10	36.60	45.50	89	8.00					
2.75	16.50	19.50	50	3.00	4.50	27.00	33.00	79	6.00	6.20	37.20	46.00	89	8.00					
2.80	16.80	19.80	50	3.00	4.55	27.30	35.50	79	6.00	6.30	37.80	47.00	89	8.00					
2.85	17.10	20.10	50	3.00	4.60	27.60	35.50	79	6.00	6.40	38.40	47.50	89	8.00					

Hochleistungsbohrer Phoenix TC2
Foret à grand rendement Phoenix TC2
Punta ad alto rendimento Phoenix TC2
High performance drill Phoenix TC2

Art. 52909



d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1.00	9.00	11.00	51	3.00	4.80	43.20	51.00	91	6.00
1.10	9.90	12.00	51	3.00	4.90	44.10	52.00	91	6.00
1.20	10.80	13.00	51	3.00	5.00	45.00	53.00	91	6.00
1.30	11.70	14.00	51	3.00	5.10	45.90	54.00	100	6.00
1.40	12.60	15.00	51	3.00	5.20	46.80	55.00	100	6.00
1.50	13.50	16.50	51	3.00	5.30	47.70	56.00	100	6.00
1.60	14.40	17.50	51	3.00	5.40	48.60	57.00	100	6.00
1.70	15.30	18.50	51	3.00	5.50	49.50	57.50	100	6.00
1.80	16.20	19.00	51	3.00	5.60	50.40	58.50	100	6.00
1.90	17.10	20.00	51	3.00	5.70	51.30	59.50	100	6.00
2.00	18.00	21.00	51	3.00	5.80	52.20	60.00	100	6.00
2.10	18.90	22.00	61	3.00	5.90	53.10	61.00	100	6.00
2.20	19.80	23.00	61	3.00	6.00	54.00	62.00	100	6.00
2.30	20.70	24.00	61	3.00	6.10	54.90	64.00	111	8.00
2.40	21.60	24.50	61	3.00	6.20	55.80	65.00	111	8.00
2.50	22.50	25.50	61	3.00	6.30	56.70	66.00	111	8.00
2.60	23.40	26.50	61	3.00	6.40	57.60	66.50	111	8.00
2.70	24.30	27.50	61	3.00	6.50	58.50	67.50	111	8.00
2.80	25.20	28.00	61	3.00	6.60	59.40	68.50	111	8.00
2.90	26.10	29.00	61	3.00	6.70	60.30	69.50	111	8.00
3.00	27.00	31.00	61	3.00	6.80	61.20	70.00	111	8.00
3.10	27.90	32.00	79	6.00	6.90	62.10	71.00	111	8.00
3.20	28.80	33.00	79	6.00	7.00	63.00	73.00	111	8.00
3.30	29.70	34.00	79	6.00	7.10	63.90	74.00	120	8.00
3.40	30.60	35.00	79	6.00	7.20	64.80	75.00	120	8.00
3.50	31.50	36.50	79	6.00	7.30	65.70	76.00	120	8.00
3.60	32.40	37.50	79	6.00	7.40	66.60	76.50	120	8.00
3.70	33.30	38.50	79	6.00	7.50	67.50	77.50	120	8.00
3.80	34.20	39.00	79	6.00	7.60	68.40	78.50	120	8.00
3.90	35.10	40.00	79	6.00	7.70	69.30	79.50	120	8.00
4.00	36.00	41.00	79	6.00	7.80	70.20	80.00	120	8.00
4.10	36.90	43.00	91	6.00	7.90	71.00	81.00	120	8.00
4.20	37.80	44.00	91	6.00	8.00	72.00	82.00	120	8.00
4.30	38.70	45.00	91	6.00	8.50	76.50	87.50	134	10.00
4.40	39.60	45.50	91	6.00	9.00	81.00	92.00	134	10.00
4.50	40.50	46.50	91	6.00	9.50	85.50	96.50	144	10.00
4.60	41.40	49.50	91	6.00	10.00	90.00	102.00	144	10.00
4.70	42.30	50.50	91	6.00					

Hochleistungsbohrer Phoenix TC2
Foret à grand rendement Phoenix TC2
Punta ad alto rendimento Phoenix TC2
High performance drill Phoenix TC2

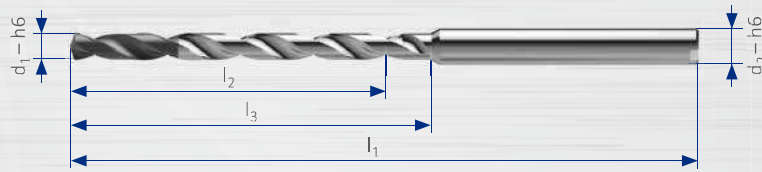
Art. 52912

P1-3 M1,2

K1,2 N1-6

S1,2 H1

O1



VHM MD/SC AlCrTiN

Z 2 $\angle 137^\circ$

$\angle 30^\circ$ 12xd



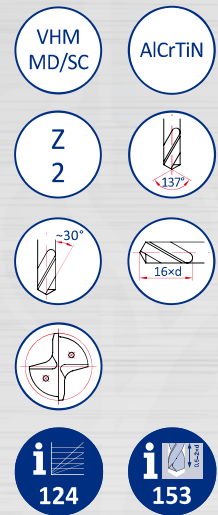
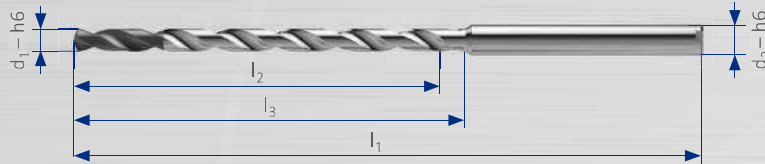
i 124

i 153

d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1.00	12.00	14.00	50	3.00	4.80	57.60	65.50	105	6.00
1.10	13.20	15.50	50	3.00	4.90	58.80	67.00	105	6.00
1.20	14.40	16.50	50	3.00	5.00	60.00	68.00	105	6.00
1.30	15.60	17.50	50	3.00	5.10	61.20	69.50	118	6.00
1.40	16.80	19.00	50	3.00	5.20	62.40	70.50	118	6.00
1.50	18.00	21.00	50	3.00	5.30	63.60	71.50	118	6.00
1.60	19.20	22.50	50	3.00	5.40	64.80	73.00	118	6.00
1.70	20.40	23.50	50	3.00	5.50	66.00	74.00	118	6.00
1.80	21.60	24.50	50	3.00	5.60	67.20	75.50	118	6.00
1.90	22.80	26.00	55	3.00	5.70	68.40	76.50	118	6.00
2.00	24.00	27.00	55	3.00	5.80	69.60	77.50	118	6.00
2.10	25.20	28.50	55	3.00	5.90	70.80	79.00	118	6.00
2.20	26.40	29.50	55	3.00	6.00	72.00	80.00	118	6.00
2.30	27.60	30.50	55	3.00	6.10	73.20	82.50	136	8.00
2.40	28.80	32.00	55	3.00	6.20	74.40	83.50	136	8.00
2.50	30.00	33.00	60	3.00	6.30	75.60	84.50	136	8.00
2.60	31.20	34.50	60	3.00	6.40	76.80	86.00	136	8.00
2.70	32.40	35.50	60	3.00	6.50	78.00	87.50	136	8.00
2.80	33.60	36.50	60	3.00	6.60	79.20	88.50	136	8.00
2.90	34.80	38.00	60	3.00	6.70	80.40	89.50	136	8.00
3.00	36.00	40.00	60	3.00	6.80	81.60	90.50	136	8.00
3.10	37.20	41.50	80	6.00	6.90	82.80	92.00	136	8.00
3.20	38.40	42.50	80	6.00	7.00	84.00	94.00	136	8.00
3.30	39.60	43.50	80	6.00	7.10	85.20	95.50	148	8.00
3.40	40.80	45.00	85	6.00	7.20	86.40	96.50	148	8.00
3.50	42.00	47.00	85	6.00	7.30	87.60	97.50	148	8.00
3.60	43.20	48.50	85	6.00	7.40	88.80	99.00	148	8.00
3.70	44.40	49.50	90	6.00	7.50	90.00	100.00	148	8.00
3.80	45.60	50.50	90	6.00	7.60	91.20	101.50	148	8.00
3.90	46.80	52.00	90	6.00	7.70	92.40	102.50	148	8.00
4.00	48.00	53.00	90	6.00	7.80	93.60	103.50	148	8.00
4.10	49.20	55.50	105	6.00	7.90	94.80	105.00	148	8.00
4.20	50.40	56.50	105	6.00	8.00	96.00	106.00	148	8.00
4.30	51.60	57.50	105	6.00	8.50	102.00	113.00	162	10.00
4.40	52.80	59.00	105	6.00	9.00	108.00	119.00	162	10.00
4.50	54.00	60.00	105	6.00	9.50	114.00	125.00	175	10.00
4.60	55.20	63.50	105	6.00	10.00	120.00	132.00	175	10.00
4.70	56.40	64.50	105	6.00					

Hochleistungsbohrer Phoenix TC2
Foret à grand rendement Phoenix TC2
Punta ad alto rendimento Phoenix TC2
High performance drill Phoenix TC2

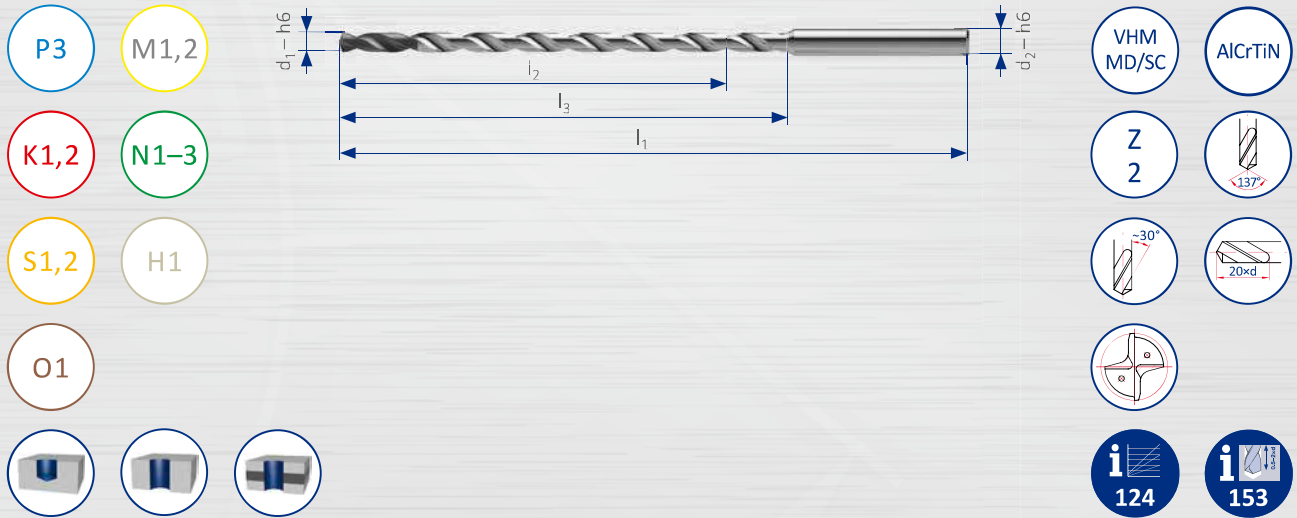
Art. 52916



d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1.00	16.00	18.00	65	3.00	4.80	76.80	85.00	126	6.00
1.10	17.60	19.50	65	3.00	4.90	78.40	86.50	126	6.00
1.20	19.20	21.00	65	3.00	5.00	80.00	88.00	126	6.00
1.30	20.80	23.00	65	3.00	5.10	81.60	89.50	142	6.00
1.40	22.40	24.50	65	3.00	5.20	83.20	91.00	142	6.00
1.50	24.00	27.00	65	3.00	5.30	84.80	93.00	142	6.00
1.60	25.60	28.50	65	3.00	5.40	86.40	94.50	142	6.00
1.70	27.20	30.00	65	3.00	5.50	88.00	96.00	142	6.00
1.80	28.80	32.00	65	3.00	5.60	89.60	97.50	142	6.00
1.90	30.40	33.50	65	3.00	5.70	91.20	99.00	142	6.00
2.00	32.00	35.00	65	3.00	5.80	92.80	101.00	142	6.00
2.10	33.60	36.50	82	3.00	5.90	94.40	102.50	142	6.00
2.20	35.20	38.00	82	3.00	6.00	96.00	104.00	142	6.00
2.30	36.80	40.00	82	3.00	6.10	97.60	106.50	160	8.00
2.40	38.40	41.50	82	3.00	6.20	99.20	108.00	160	8.00
2.50	40.00	43.00	82	3.00	6.30	100.80	110.00	160	8.00
2.60	41.60	44.50	82	3.00	6.40	102.40	111.50	160	8.00
2.70	43.20	46.00	82	3.00	6.50	104.00	113.00	160	8.00
2.80	44.80	48.00	82	3.00	6.60	105.60	114.50	160	8.00
2.90	46.40	49.50	82	3.00	6.70	107.20	116.00	160	8.00
3.00	48.00	52.00	82	3.00	6.80	108.80	118.00	160	8.00
3.10	49.60	53.50	107	6.00	6.90	110.40	119.50	160	8.00
3.20	51.20	55.00	107	6.00	7.00	112.00	122.00	160	8.00
3.30	52.80	57.00	107	6.00	7.10	113.60	123.50	176	8.00
3.40	54.40	58.50	107	6.00	7.20	115.20	125.00	176	8.00
3.50	56.00	61.00	107	6.00	7.30	116.80	127.00	176	8.00
3.60	57.60	62.50	107	6.00	7.40	118.40	128.50	176	8.00
3.70	59.20	64.00	107	6.00	7.50	120.00	130.00	176	8.00
3.80	60.80	66.00	107	6.00	7.60	121.60	131.50	176	8.00
3.90	62.40	67.50	107	6.00	7.70	123.20	133.00	176	8.00
4.00	64.00	69.00	107	6.00	7.80	124.80	135.00	176	8.00
4.10	65.60	71.50	126	6.00	7.90	126.40	136.50	176	8.00
4.20	67.20	73.00	126	6.00	8.00	128.00	138.00	176	8.00
4.30	68.80	75.00	126	6.00	8.50	136.00	147.00	197	10.00
4.40	70.40	76.50	126	6.00	9.00	144.00	155.00	197	10.00
4.50	72.00	78.00	126	6.00	9.50	152.00	163.00	214	10.00
4.60	73.60	81.50	126	6.00	10.00	160.00	172.00	214	10.00
4.70	75.20	83.00	126	6.00					

Hochleistungsbohrer Phoenix TC2
Foret à grand rendement Phoenix TC2
Punta ad alto rendimento Phoenix TC2
High performance drill Phoenix TC2

Art. 52920



d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
3.00	60.00	69.00	108	6.00
3.30	66.00	75.00	113	6.00
4.00	80.00	94.00	132	6.00
4.20	84.00	98.00	136	6.00
5.00	100.00	107.00	145	6.00
6.00	120.00	138.00	176	6.00
6.80	136.00	156.00	196	8.00
7.00	140.00	161.00	201	8.00
8.00	160.00	182.00	222	8.00
8.50	170.00	195.00	240	10.00
9.00	180.00	207.00	252	10.00
10.00	200.00	230.00	275	10.00

Hochleistungsbohrer Phoenix TC2
Foret à grand rendement Phoenix TC2
Punta ad alto rendimento Phoenix TC2
High performance drill Phoenix TC2

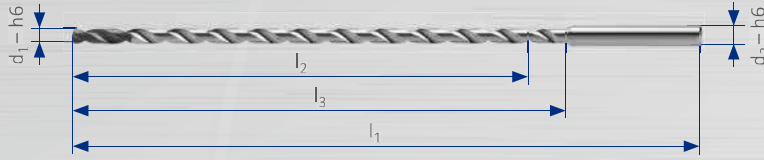
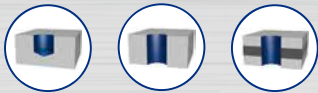
Art. 52930

P3 M1,2

K1,2 N1-3

S1,2 H1

O1



VHM MD/SC AlCrTiN

Z 2 $\angle 137^\circ$

$\angle 30^\circ$ 30xd



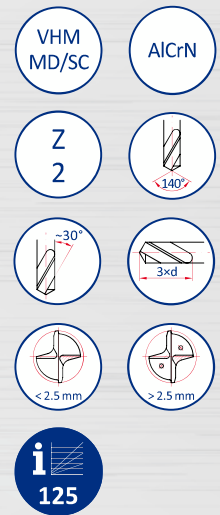
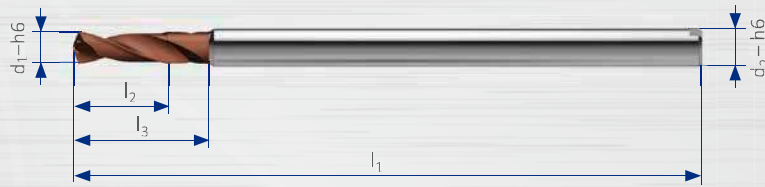
i 124

i 153

d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
3.00	90.00	99.00	138	6.00
3.30	99.00	108.00	146	6.00
4.00	120.00	134.00	172	6.00
4.20	126.00	140.00	178	6.00
5.00	150.00	167.00	205	6.00
6.00	180.00	198.00	236	6.00
6.80	204.00	224.00	264	8.00
7.00	210.00	231.00	271	8.00
8.00	240.00	262.00	302	8.00
8.50	255.00	280.00	325	10.00
9.00	270.00	297.00	342	10.00
10.00	285.00	300.00	345	10.00

Hochleistungsbohrer Phoenix
Foret à grand rendement Phoenix
Punta ad alto rendimento Phoenix
High performance drill Phoenix

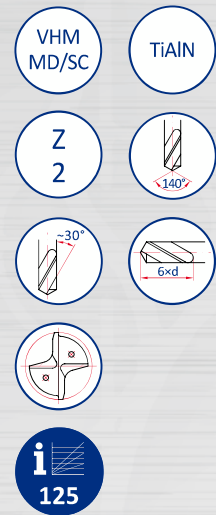
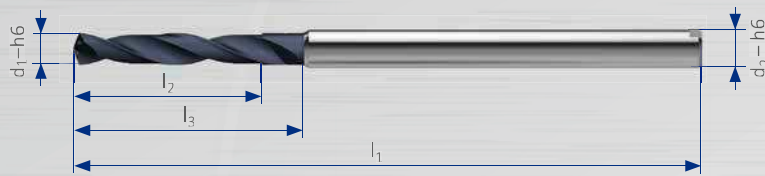
Art. 50938



d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1.00	3.00	5.00	38	3.00	4.80	14.40	22.50	60	6.00	8.60	25.80	37.00	79	10.00
1.10	3.30	5.50	38	3.00	4.90	14.70	22.50	60	6.00	8.70	26.10	37.00	79	10.00
1.20	3.60	5.50	38	3.00	5.00	15.00	22.50	60	6.00	8.80	26.40	37.50	79	10.00
1.30	3.90	6.00	38	3.00	5.10	15.30	23.50	64	6.00	8.90	26.70	37.50	79	10.00
1.40	4.20	6.00	38	3.00	5.20	15.60	23.50	64	6.00	9.00	27.00	38.00	79	10.00
1.50	4.50	6.50	38	3.00	5.30	15.90	24.00	64	6.00	9.10	27.30	38.50	85	10.00
1.60	4.80	7.50	38	3.00	5.40	16.20	24.00	64	6.00	9.20	27.60	38.50	85	10.00
1.70	5.10	8.00	38	3.00	5.50	16.50	24.50	64	6.00	9.30	27.90	39.00	85	10.00
1.80	5.40	8.50	38	3.00	5.60	16.80	24.50	64	6.00	9.40	28.20	39.00	85	10.00
1.90	5.70	8.50	38	3.00	5.70	17.10	25.50	64	6.00	9.50	28.50	40.00	85	10.00
2.00	6.00	9.00	38	3.00	5.80	17.40	25.50	64	6.00	9.60	28.80	40.00	85	10.00
2.10	6.30	9.50	38	3.00	5.90	17.70	25.50	64	6.00	9.70	29.10	40.50	85	10.00
2.20	6.60	9.50	38	3.00	6.00	18.00	27.00	64	6.00	9.80	29.40	40.50	85	10.00
2.30	6.90	10.00	38	3.00	6.10	18.30	27.50	68	8.00	9.90	29.70	41.00	85	10.00
2.40	7.20	10.00	38	3.00	6.20	18.60	27.50	68	8.00	10.00	30.00	42.00	85	10.00
2.50	7.50	10.50	50	3.00	6.30	18.90	28.00	68	8.00	10.10	30.30	42.50	93	12.00
2.60	7.80	11.00	50	3.00	6.40	19.20	28.00	68	8.00	10.20	30.60	42.50	93	12.00
2.70	8.10	11.50	50	3.00	6.50	19.50	28.50	68	8.00	10.30	30.90	43.00	93	12.00
2.80	8.40	11.50	50	3.00	6.60	19.80	29.00	68	8.00	10.40	31.20	43.00	93	12.00
2.90	8.70	12.00	50	3.00	6.70	20.10	29.50	68	8.00	10.50	31.50	43.50	93	12.00
3.00	9.00	12.50	50	3.00	6.80	20.40	29.50	68	8.00	10.60	31.80	44.00	93	12.00
3.10	9.30	13.50	55	6.00	6.90	20.70	30.00	68	8.00	10.70	32.10	44.00	93	12.00
3.20	9.60	13.50	55	6.00	7.00	21.00	31.00	68	8.00	10.80	32.40	44.50	93	12.00
3.30	9.90	13.50	55	6.00	7.10	21.30	31.50	72	8.00	10.90	32.70	44.50	93	12.00
3.40	10.20	14.00	55	6.00	7.20	21.60	31.50	72	8.00	11.00	33.00	46.00	93	12.00
3.50	10.50	14.50	55	6.00	7.30	21.90	32.00	72	8.00	11.10	33.30	46.50	97	12.00
3.60	10.80	15.00	55	6.00	7.40	22.20	32.00	72	8.00	11.20	33.60	46.50	97	12.00
3.70	11.10	15.00	55	6.00	7.50	22.50	32.50	72	8.00	11.30	33.90	47.00	97	12.00
3.80	11.40	15.50	55	6.00	7.60	22.80	32.50	72	8.00	11.40	34.20	47.00	97	12.00
3.90	11.70	15.50	55	6.00	7.70	23.10	33.50	72	8.00	11.50	34.50	48.00	97	12.00
4.00	12.00	16.00	55	6.00	7.80	23.40	33.50	72	8.00	11.60	34.80	48.00	97	12.00
4.10	12.30	18.50	60	6.00	7.90	23.70	34.00	72	8.00	11.70	35.10	48.00	97	12.00
4.20	12.60	18.50	60	6.00	8.00	24.00	34.00	72	8.00	11.80	35.40	48.50	97	12.00
4.30	12.90	19.00	60	6.00	8.10	24.30	35.50	79	10.00	11.90	35.70	48.50	97	12.00
4.40	13.20	19.00	60	6.00	8.20	24.60	35.50	79	10.00	12.00	36.00	50.00	97	12.00
4.50	13.50	20.50	60	6.00	8.30	24.90	36.00	79	10.00	12.50	37.80	53.00	100	14.00
4.60	13.80	22.00	60	6.00	8.40	25.20	36.00	79	10.00	12.70	38.10	53.00	100	14.00
4.70	14.10	22.00	60	6.00	8.50	25.50	36.50	79	10.00					

Hochleistungsbohrer Phoenix
Foret à grand rendement Phoenix
Punta ad alto rendimento Phoenix
High performance drill Phoenix

Art. 50940



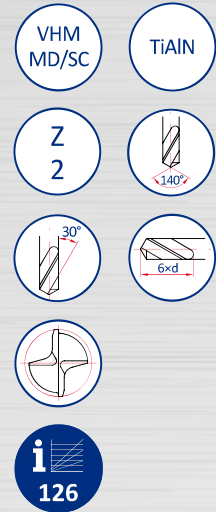
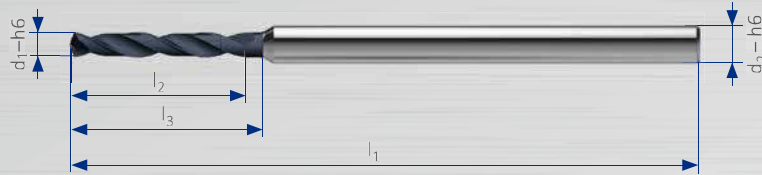
d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1.00	6.00	8.00	38	3.00	2.90	17.40	20.40	50	3.00	4.80	28.80	37.00	79	6.00	7.40	44.40	54.50	95	8.00
1.05	6.30	8.30	38	3.00	2.95	17.70	20.70	50	3.00	4.85	29.10	37.50	79	6.00	7.50	45.00	55.00	95	8.00
1.10	6.60	8.60	38	3.00	3.00	18.00	21.00	50	3.00	4.90	29.40	37.50	79	6.00	7.60	45.60	55.50	95	8.00
1.15	6.90	8.90	38	3.00	3.05	18.30	22.30	66	6.00	4.95	29.70	38.00	79	6.00	7.70	46.20	56.00	95	8.00
1.20	7.20	9.20	38	3.00	3.10	18.60	22.60	66	6.00	5.00	30.00	38.00	79	6.00	7.80	46.80	57.00	95	8.00
1.25	7.50	9.50	38	3.00	3.15	18.90	22.90	66	6.00	5.05	30.30	38.50	79	6.00	7.90	47.40	57.50	95	8.00
1.30	7.80	9.80	38	3.00	3.20	19.20	23.20	66	6.00	5.10	30.60	38.50	79	6.00	8.00	48.00	58.00	95	8.00
1.35	8.10	10.10	38	3.00	3.25	19.50	23.50	66	6.00	5.15	30.90	39.00	79	6.00	8.10	48.60	59.50	106	10.00
1.40	8.40	10.40	38	3.00	3.30	19.80	23.80	66	6.00	5.20	31.20	39.00	79	6.00	8.20	49.20	60.00	106	10.00
1.45	8.70	10.70	38	3.00	3.35	20.10	24.10	66	6.00	5.25	31.50	40.00	79	6.00	8.30	49.80	61.00	106	10.00
1.50	9.00	11.00	38	3.00	3.40	20.40	24.40	66	6.00	5.30	31.80	40.00	79	6.00	8.40	50.40	61.50	106	10.00
1.55	9.30	11.30	38	3.00	3.45	20.70	24.70	66	6.00	5.35	32.10	40.50	79	6.00	8.50	51.00	62.00	106	10.00
1.60	9.60	12.60	38	3.00	3.50	21.00	25.00	66	6.00	5.40	32.40	40.50	79	6.00	8.60	51.60	62.50	106	10.00
1.65	9.90	12.90	38	3.00	3.55	21.30	25.30	66	6.00	5.45	32.70	41.00	79	6.00	8.70	52.20	63.00	106	10.00
1.70	10.20	13.20	38	3.00	3.60	21.60	25.60	66	6.00	5.50	33.00	41.00	79	6.00	8.80	52.80	64.00	106	10.00
1.75	10.50	13.50	38	3.00	3.65	21.90	25.90	66	6.00	5.55	33.30	41.50	81	6.00	8.90	53.40	64.50	106	10.00
1.80	10.80	13.80	38	3.00	3.70	22.20	26.20	66	6.00	5.60	33.60	41.50	81	6.00	9.00	54.00	65.00	106	10.00
1.85	11.10	14.10	38	3.00	3.75	22.50	26.50	66	6.00	5.65	33.90	42.00	81	6.00	9.10	54.60	65.50	113	10.00
1.90	11.40	14.40	38	3.00	3.80	22.80	26.80	66	6.00	5.70	34.20	42.00	81	6.00	9.20	55.20	66.00	113	10.00
1.95	11.70	14.70	38	3.00	3.85	23.10	27.10	66	6.00	5.75	34.50	43.00	81	6.00	9.30	55.80	67.00	113	10.00
2.00	12.00	15.00	50	3.00	3.90	23.40	27.40	66	6.00	5.80	34.80	43.00	81	6.00	9.40	56.40	67.50	113	10.00
2.05	12.30	15.30	50	3.00	3.95	23.70	27.70	66	6.00	5.85	35.10	43.50	81	6.00	9.50	57.00	68.00	113	10.00
2.10	12.60	15.60	50	3.00	4.00	24.00	28.00	66	6.00	5.90	35.40	43.50	81	6.00	9.60	57.60	68.50	113	10.00
2.15	12.90	15.90	50	3.00	4.05	24.30	30.20	79	6.00	5.95	35.70	44.00	81	6.00	9.70	58.20	69.00	113	10.00
2.20	13.20	16.20	50	3.00	4.10	24.60	30.50	79	6.00	6.00	36.00	44.00	81	6.00	9.80	58.80	70.00	113	10.00
2.25	13.50	16.50	50	3.00	4.15	24.90	31.00	79	6.00	6.10	36.60	45.50	89	8.00	9.90	59.40	70.50	113	10.00
2.30	13.80	16.80	50	3.00	4.20	25.20	31.00	79	6.00	6.20	37.20	46.00	89	8.00	10.00	60.00	72.00	113	10.00
2.35	14.10	17.10	50	3.00	4.25	25.50	31.50	79	6.00	6.30	37.80	47.00	89	8.00	10.10	60.60	72.50	125	12.00
2.40	14.40	17.40	50	3.00	4.30	25.80	32.00	79	6.00	6.40	38.40	47.50	89	8.00	10.20	61.20	73.00	125	12.00
2.45	14.70	17.70	50	3.00	4.35	26.10	32.50	79	6.00	6.50	39.00	48.00	89	8.00	10.30	61.80	74.00	125	12.00
2.50	15.00	18.00	50	3.00	4.40	26.40	32.50	79	6.00	6.60	39.60	48.50	89	8.00	10.40	62.40	74.50	125	12.00
2.55	15.30	18.30	50	3.00	4.45	26.70	33.00	79	6.00	6.70	40.20	49.00	89	8.00	10.50	63.00	75.00	125	12.00
2.60	15.60	18.60	50	3.00	4.50	27.00	33.00	79	6.00	6.80	40.80	50.00	89	8.00	10.60	63.60	75.50	125	12.00
2.65	15.90	18.90	50	3.00	4.55	27.30	35.50	79	6.00	6.90	41.40	50.50	89	8.00	10.70	64.20	76.00	125	12.00
2.70	16.20	19.20	50	3.00	4.60	27.60	35.50	79	6.00	7.00	42.00	52.00	89	8.00	10.80	64.80	77.00	125	12.00
2.75	16.50	19.50	50	3.00	4.65	27.90	36.00	79	6.00	7.10	42.60	52.50	95	8.00	10.90	65.40	77.50	125	12.00
2.80	16.80	19.80	50	3.00	4.70	28.20	36.00	79	6.00	7.20	43.20	53.50	95	8.00	11.00	66.00	79.00	125	12.00
2.85	17.10	20.10	50	3.00	4.75	28.50	37.00	79	6.00	7.30	43.80	54.00	95	8.00	11.10	66.60	79.50	132	12.00



d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
11.20	67.20	80.00	132	12.00
11.30	67.80	81.00	132	12.00
11.40	68.40	81.50	132	12.00
11.50	69.00	82.00	132	12.00
11.60	69.60	82.50	132	12.00
11.70	70.20	83.00	132	12.00
11.80	70.80	84.00	132	12.00
11.90	71.40	84.50	132	12.00
12.00	72.00	86.00	132	12.00
12.50	75.00	90.00	140	14.00
12.70	76.20	91.00	140	14.00

Hochleistungsbohrer Phoenix
Foret à grand rendement Phoenix
Punta ad alto rendimento Phoenix
High performance drill Phoenix

Art. 50941



d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm
0.50	3.00	4.80	38	3.00
0.60	3.60	5.40	38	3.00
0.70	4.20	6.00	38	3.00
0.80	4.80	6.70	38	3.00
0.90	5.40	7.80	38	3.00
1.00	6.00	8.00	38	3.00
1.10	6.60	8.60	38	3.00
1.20	7.20	9.20	38	3.00
1.30	7.80	9.80	38	3.00
1.40	8.40	10.40	38	3.00
1.50	9.00	11.00	38	3.00
1.60	9.60	12.60	38	3.00
1.70	10.20	13.20	38	3.00
1.80	10.80	13.80	38	3.00
1.90	11.40	14.40	38	3.00
2.00	12.00	15.00	50	3.00
2.10	12.60	15.60	50	3.00
2.20	13.20	16.20	50	3.00
2.30	13.80	16.80	50	3.00
2.40	14.40	17.40	50	3.00
2.50	15.00	18.00	50	3.00
2.60	15.60	18.60	50	3.00
2.70	16.20	19.20	50	3.00
2.80	16.80	19.80	50	3.00
2.90	17.40	20.40	50	3.00
3.00	18.00	21.00	50	3.00

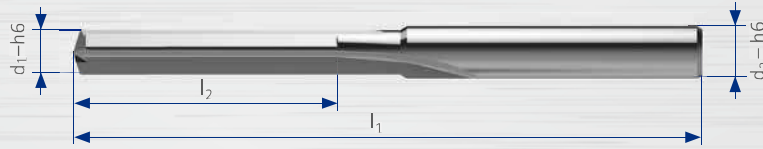
Hochleistungsbohrer Quadro Plus
Foret à grand rendement Quadro Plus
Punta ad alto rendimento Quadro Plus
High performance drill Quadro Plus

Art. 52100

K1,2

N2,3,5

O1



VHM
MD/SC

Z
2



d_1 mm	l_2 mm	l_1 mm	d_2 mm
3.00	18.00	82	6.00
3.30	20.00	82	6.00
3.50	21.00	82	6.00
4.00	24.00	82	6.00
4.20	26.00	88	6.00
4.50	27.00	88	6.00
5.00	30.00	88	6.00
5.50	33.00	94	6.00
6.00	36.00	94	6.00
6.50	39.00	102	8.00
6.80	41.00	102	8.00
7.00	42.00	102	8.00
7.50	45.00	108	8.00
8.00	48.00	108	8.00
8.50	51.00	121	10.00
9.00	54.00	121	10.00
9.50	57.00	127	10.00
10.00	60.00	127	10.00
10.20	62.00	141	12.00
10.50	63.00	141	12.00
11.00	66.00	141	12.00
11.50	69.00	147	12.00
12.00	72.00	147	12.00
12.50	75.00	155	14.00
13.00	78.00	155	14.00
13.50	81.00	162	14.00
14.00	84.00	162	14.00
14.50	87.00	172	16.00
15.00	90.00	172	16.00
15.50	93.00	178	16.00
16.00	96.00	178	16.00
16.50	99.00	192	18.00
17.00	102.00	192	18.00
17.50	105.00	192	18.00
18.00	108.00	192	18.00
18.50	111.00	207	20.00
19.00	114.00	207	20.00
19.50	117.00	207	20.00

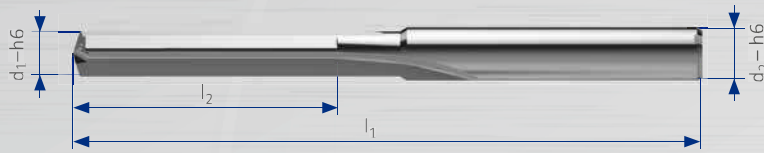
Hochleistungsbohrer Quadro Plus
Foret à grand rendement Quadro Plus
Punta ad alto rendimento Quadro Plus
High performance drill Quadro Plus

Art. 52200

K1,2

N2,3,5

O1



VHM
MD/SC

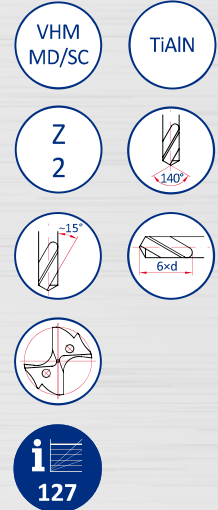
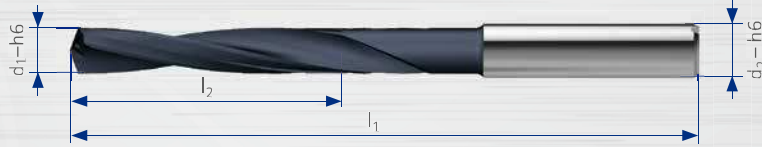
Z
2



d ₁ mm	l ₂ mm	l ₁ mm	d ₂ mm	d ₁ mm	l ₂ mm	l ₁ mm	d ₂ mm
3.00	36.00	106	6.00	17.00	204.00	300	18.00
3.20	39.00	106	6.00	17.50	210.00	300	18.00
3.30	40.00	106	6.00	18.00	216.00	300	18.00
3.50	42.00	106	6.00	18.50	222.00	327	20.00
4.00	48.00	106	6.00	19.00	228.00	327	20.00
4.20	51.00	118	6.00	19.50	234.00	327	20.00
4.50	54.00	118	6.00	20.00	240.00	327	20.00
4.80	58.00	118	6.00				
5.00	60.00	118	6.00				
5.50	66.00	130	6.00				
6.00	72.00	130	6.00				
6.40	78.00	144	8.00				
6.50	78.00	144	8.00				
6.80	82.00	144	8.00				
7.00	84.00	144	8.00				
7.50	90.00	156	8.00				
7.60	92.00	156	8.00				
8.00	96.00	156	8.00				
8.50	102.00	175	10.00				
9.00	108.00	175	10.00				
9.50	114.00	187	10.00				
10.00	120.00	187	10.00				
10.20	123.00	207	12.00				
10.50	126.00	207	12.00				
11.00	132.00	207	12.00				
11.50	138.00	219	12.00				
12.00	144.00	219	12.00				
12.50	150.00	233	14.00				
12.70	153.00	233	14.00				
13.00	156.00	233	14.00				
13.50	162.00	245	14.00				
14.00	168.00	245	14.00				
14.50	174.00	262	16.00				
15.00	180.00	262	16.00				
15.50	186.00	274	16.00				
15.90	191.00	274	16.00				
16.00	192.00	274	16.00				
16.50	198.00	300	18.00				

Hochleistungsbohrer Quadro 15 Plus
Foret à grand rendement Quadro 15 Plus
Punta ad alto rendimento Quadro 15 Plus
High performance drill Quadro 15 Plus

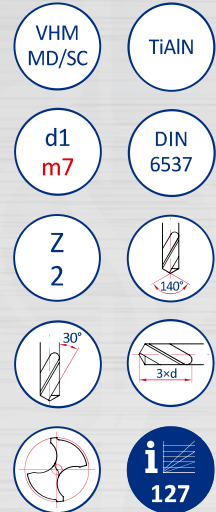
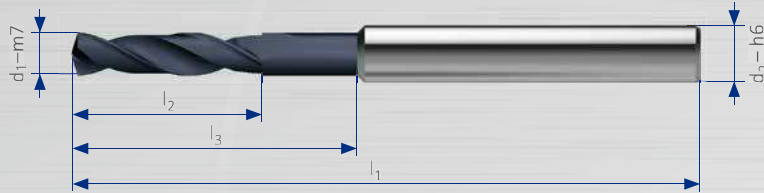
Art. 52150



d ₁	l ₂	l ₁	d ₂
mm	mm	mm	mm
4.00	24.00	75	6.00
4.20	25.50	75	6.00
4.50	27.00	75	6.00
5.00	30.00	87	6.00
5.50	33.00	87	6.00
6.00	36.00	87	6.00
6.50	39.00	100	8.00
6.80	41.00	100	8.00
7.00	42.00	100	8.00
7.50	45.00	100	8.00
8.00	48.00	100	8.00
8.50	51.00	118	10.00
9.00	54.00	118	10.00
9.50	57.00	118	10.00
10.00	60.00	118	10.00
10.20	62.00	135	12.00
10.50	63.00	135	12.00
11.00	66.00	135	12.00
11.50	69.00	135	12.00
12.00	72.00	135	12.00
12.50	75.00	147	14.00
13.00	78.00	147	14.00
13.50	81.00	147	14.00
14.00	84.00	147	14.00
14.50	87.00	164	16.00
15.00	90.00	164	16.00
15.50	93.00	164	16.00
16.00	96.00	164	16.00
16.50	99.00	178	18.00
17.00	102.00	178	18.00
17.50	105.00	178	18.00
18.00	108.00	178	18.00
18.50	111.00	195	20.00
19.00	114.00	195	20.00
19.50	117.00	195	20.00
20.00	120.00	195	20.00

Spiralbohrer Fastcut
Foret hélicoïdal Fastcut
Punta elicoidale Fastcut
Twist drill Fastcut

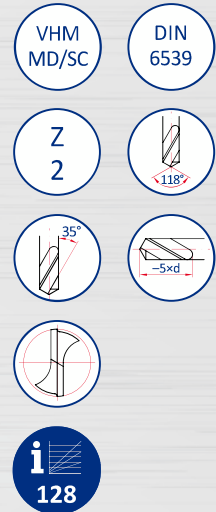
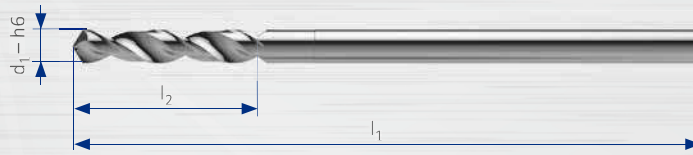
Art. 50950



d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
3.00	14.00	20.00	62	6.00	6.80	24.00	34.00	79	8.00	10.60	40.00	55.00	102	12.00
3.10	14.00	20.00	62	6.00	6.90	24.00	34.00	79	8.00	10.70	40.00	55.00	102	12.00
3.20	14.00	20.00	62	6.00	7.00	24.00	34.00	79	8.00	10.80	40.00	55.00	102	12.00
3.30	14.00	20.00	62	6.00	7.10	29.00	41.00	79	8.00	10.90	40.00	55.00	102	12.00
3.40	14.00	20.00	62	6.00	7.20	29.00	41.00	79	8.00	11.00	40.00	55.00	102	12.00
3.50	14.00	20.00	62	6.00	7.30	29.00	41.00	79	8.00	11.10	40.00	55.00	102	12.00
3.60	14.00	20.00	62	6.00	7.40	29.00	41.00	79	8.00	11.20	40.00	55.00	102	12.00
3.70	14.00	20.00	62	6.00	7.50	29.00	41.00	79	8.00	11.30	40.00	55.00	102	12.00
3.80	17.00	24.00	66	6.00	7.60	29.00	41.00	79	8.00	11.40	40.00	55.00	102	12.00
3.90	17.00	24.00	66	6.00	7.70	29.00	41.00	79	8.00	11.50	40.00	55.00	102	12.00
4.00	17.00	24.00	66	6.00	7.80	29.00	41.00	79	8.00	11.60	40.00	55.00	102	12.00
4.10	17.00	24.00	66	6.00	7.90	29.00	41.00	79	8.00	11.70	40.00	55.00	102	12.00
4.20	17.00	24.00	66	6.00	8.00	29.00	41.00	79	8.00	11.80	40.00	55.00	102	12.00
4.30	17.00	24.00	66	6.00	8.10	35.00	47.00	89	10.00	11.90	40.00	55.00	102	12.00
4.40	17.00	24.00	66	6.00	8.20	35.00	47.00	89	10.00	12.00	40.00	55.00	102	12.00
4.50	17.00	24.00	66	6.00	8.30	35.00	47.00	89	10.00	12.50	43.00	60.00	107	14.00
4.60	17.00	24.00	66	6.00	8.40	35.00	47.00	89	10.00	12.80	43.00	60.00	107	14.00
4.70	17.00	24.00	66	6.00	8.50	35.00	47.00	89	10.00	13.00	43.00	60.00	107	14.00
4.80	20.00	28.00	66	6.00	8.60	35.00	47.00	89	10.00	13.50	43.00	60.00	107	14.00
4.90	20.00	28.00	66	6.00	8.70	35.00	47.00	89	10.00	13.80	43.00	60.00	107	14.00
5.00	20.00	28.00	66	6.00	8.80	35.00	47.00	89	10.00	14.00	43.00	60.00	107	14.00
5.10	20.00	28.00	66	6.00	8.90	35.00	47.00	89	10.00	14.50	45.00	65.00	115	16.00
5.20	20.00	28.00	66	6.00	9.00	35.00	47.00	89	10.00	14.80	45.00	65.00	115	16.00
5.30	20.00	28.00	66	6.00	9.10	35.00	47.00	89	10.00	15.00	45.00	65.00	115	16.00
5.40	20.00	28.00	66	6.00	9.20	35.00	47.00	89	10.00	15.50	45.00	65.00	115	16.00
5.50	20.00	28.00	66	6.00	9.30	35.00	47.00	89	10.00	15.80	45.00	65.00	115	16.00
5.60	20.00	28.00	66	6.00	9.40	35.00	47.00	89	10.00	16.00	45.00	65.00	115	16.00
5.70	20.00	28.00	66	6.00	9.50	35.00	47.00	89	10.00	16.50	51.00	73.00	123	18.00
5.80	20.00	28.00	66	6.00	9.60	35.00	47.00	89	10.00	17.00	51.00	73.00	123	18.00
5.90	20.00	28.00	66	6.00	9.70	35.00	47.00	89	10.00	17.50	51.00	73.00	123	18.00
6.00	20.00	28.00	66	6.00	9.80	35.00	47.00	89	10.00	18.00	51.00	73.00	123	18.00
6.10	24.00	34.00	79	8.00	9.90	35.00	47.00	89	10.00	18.50	55.00	79.00	131	20.00
6.20	24.00	34.00	79	8.00	10.00	35.00	47.00	89	10.00	18.80	55.00	79.00	131	20.00
6.30	24.00	34.00	79	8.00	10.10	40.00	55.00	102	12.00	19.00	55.00	79.00	131	20.00
6.40	24.00	34.00	79	8.00	10.20	40.00	55.00	102	12.00	19.50	55.00	79.00	131	20.00
6.50	24.00	34.00	79	8.00	10.30	40.00	55.00	102	12.00	19.80	55.00	79.00	131	20.00
6.60	24.00	34.00	79	8.00	10.40	40.00	55.00	102	12.00	20.00	55.00	79.00	131	20.00
6.70	24.00	34.00	79	8.00	10.50	40.00	55.00	102	12.00					

Spiralbohrer Posicut
Foret hélicoïdal Posicut
Punta elicoidal Posicut
Twist drill Posicut

Art. 50830



d ₁ mm	l ₂ mm	l ₁ mm	d ₁ mm	l ₂ mm	l ₁ mm	d ₁ mm	l ₂ mm	l ₁ mm
0.30	1.50	19	4.10	21.50	55	7.90	36.00	79
0.40	2.30	19	4.20	21.50	55	8.00	36.00	79
0.50	2.80	20	4.30	23.00	58	8.10	36.00	79
0.60	3.30	21	4.40	23.00	58	8.20	36.00	79
0.70	4.30	23	4.50	23.00	58	8.30	36.00	79
0.80	4.80	24	4.60	23.00	58	8.40	36.00	79
0.90	5.30	25	4.70	23.00	58	8.50	36.00	79
1.00	5.70	26	4.80	25.00	62	8.60	39.00	84
1.10	6.70	28	4.90	25.00	62	8.70	39.00	84
1.20	7.70	30	5.00	25.00	62	8.80	39.00	84
1.30	7.70	30	5.10	25.00	62	8.90	39.00	84
1.40	8.70	32	5.20	25.00	62	9.00	39.00	84
1.50	8.70	32	5.30	25.00	62	9.10	39.00	84
1.60	9.70	34	5.40	27.00	66	9.20	39.00	84
1.70	9.70	34	5.50	27.00	66	9.30	39.00	84
1.80	10.70	36	5.60	27.00	66	9.40	39.00	84
1.90	10.70	36	5.70	27.00	66	9.50	39.00	84
2.00	11.50	38	5.80	27.00	66	9.60	41.00	89
2.10	11.50	38	5.90	27.00	66	9.70	41.00	89
2.20	12.50	40	6.00	27.00	66	9.80	41.00	89
2.30	12.50	40	6.10	30.00	70	9.90	41.00	89
2.40	13.50	43	6.20	30.00	70	10.00	41.00	89
2.50	13.50	43	6.30	30.00	70	10.20	41.00	89
2.60	13.50	43	6.40	30.00	70	10.50	41.00	89
2.70	15.50	46	6.50	30.00	70	11.00	45.00	95
2.80	15.50	46	6.60	30.00	70	11.50	45.00	95
2.90	15.50	46	6.70	30.00	70	12.00	49.00	102
3.00	15.50	46	6.80	33.00	74	12.50	49.00	102
3.10	17.50	49	6.90	33.00	74	13.00	49.00	102
3.20	17.50	49	7.00	33.00	74	13.50	52.00	107
3.30	17.50	49	7.10	33.00	74	14.00	52.00	107
3.40	19.50	52	7.20	33.00	74	15.00	54.00	111
3.50	19.50	52	7.30	33.00	74	16.00	56.00	115
3.60	19.50	52	7.40	33.00	74	17.00	58.00	119
3.70	19.50	52	7.50	33.00	74	18.00	60.00	123
3.80	21.50	55	7.60	36.00	79	19.00	62.00	127
3.90	21.50	55	7.70	36.00	79	20.00	64.00	131
4.00	21.50	55	7.80	36.00	79			

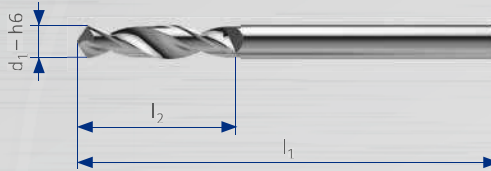
Spiralbohrer Spirec
Foret hélicoïdal Spirec
Punta elicoidale Spirec
Twist drill Spirec

Art. 50838

P1-3 M1,2

K1,2 N1-6

S1 O1



VHM MD/SC Z 2



d ₁ mm	l ₂ mm	l ₁ mm	d ₁ mm	l ₂ mm	l ₁ mm	d ₁ mm	l ₂ mm	l ₁ mm
0.30	3.70	38	2.20	14.70	38	4.90	24.70	50
0.35	3.70	38	2.25	14.70	38	5.00	24.70	50
0.40	4.70	38	2.30	14.70	38	5.10	24.70	50
0.45	4.70	38	2.35	14.70	38	5.20	24.70	50
0.50	5.70	38	2.40	14.70	38	5.30	24.70	50
0.55	5.70	38	2.45	14.70	38	5.40	24.70	50
0.60	7.70	38	2.50	14.70	38	5.50	24.70	50
0.65	7.70	38	2.55	14.70	38	5.60	24.70	50
0.70	9.70	38	2.60	14.70	38	5.70	24.70	50
0.75	9.70	38	2.65	14.70	38	5.80	24.70	50
0.80	11.70	38	2.70	14.70	38	5.90	24.70	50
0.85	11.70	38	2.75	14.70	38	6.00	24.70	50
0.90	14.70	38	2.80	14.70	38			
0.95	14.70	38	2.85	14.70	38			
1.00	14.70	38	2.90	14.70	38			
1.05	14.70	38	2.95	14.70	38			
1.10	14.70	38	3.00	14.70	38			
1.15	14.70	38	3.05	14.70	38			
1.20	14.70	38	3.10	14.70	38			
1.25	14.70	38	3.15	14.70	38			
1.30	14.70	38	3.175	14.70	38			
1.35	14.70	38	3.20	19.70	50			
1.40	14.70	38	3.30	19.70	50			
1.45	14.70	38	3.40	19.70	50			
1.50	14.70	38	3.50	19.70	50			
1.55	14.70	38	3.60	19.70	50			
1.60	14.70	38	3.70	19.70	50			
1.65	14.70	38	3.80	19.70	50			
1.70	14.70	38	3.90	19.70	50			
1.75	14.70	38	4.00	19.70	50			
1.80	14.70	38	4.10	24.70	50			
1.85	14.70	38	4.20	24.70	50			
1.90	14.70	38	4.30	24.70	50			
1.95	14.70	38	4.40	24.70	50			
2.00	14.70	38	4.50	24.70	50			
2.05	14.70	38	4.60	24.70	50			
2.10	14.70	38	4.70	24.70	50			
2.15	14.70	38	4.80	24.70	50			

Spiralbohrer Spicut
Foret hélicoïdal Spicut
Punta elicoidal Spicut
Twist drill Spicut

Art. 50820

P1,2

K1,2

N2,3,5



VHM
MD/SC

DIN
338

Z
2



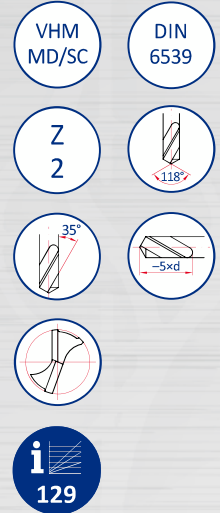
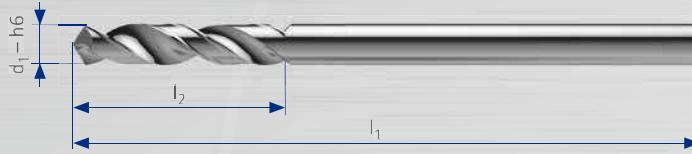
i
129



d_1 mm	l_2 mm	l_1 mm	d_1 mm	l_2 mm	l_1 mm	d_1 mm	l_2 mm	l_1 mm
0.70	8	28	4.50	45	80	8.30	73	117
0.80	9	30	4.60	45	80	8.40	73	117
0.90	10	32	4.70	45	80	8.50	73	117
1.00	11	34	4.80	50	86	8.60	78	125
1.10	13	36	4.90	50	86	8.70	78	125
1.20	15	38	5.00	50	86	8.80	78	125
1.30	15	38	5.10	50	86	8.90	78	125
1.40	17	40	5.20	50	86	9.00	78	125
1.50	17	40	5.30	50	86	9.10	78	125
1.60	19	43	5.40	55	93	9.20	78	125
1.70	19	43	5.50	55	93	9.30	78	125
1.80	21	46	5.60	55	93	9.40	78	125
1.90	21	46	5.70	55	93	9.50	78	125
2.00	23	49	5.80	55	93	9.60	84	133
2.10	23	49	5.90	55	93	9.70	84	133
2.20	26	53	6.00	55	93	9.80	84	133
2.30	26	53	6.10	61	101	9.90	84	133
2.40	29	57	6.20	61	101	10.00	84	133
2.50	29	57	6.30	61	101	10.20	84	133
2.60	29	57	6.40	61	101	10.50	84	133
2.70	31	61	6.50	61	101	11.00	91	142
2.80	31	61	6.60	61	101	11.50	91	142
2.90	31	61	6.70	61	101	12.00	98	151
3.00	31	61	6.80	67	109	12.50	98	151
3.10	34	65	6.90	67	109	13.00	98	151
3.20	34	65	7.00	67	109	13.50	105	160
3.30	34	65	7.10	67	109	14.00	105	160
3.40	37	70	7.20	67	109			
3.50	37	70	7.30	67	109			
3.60	37	70	7.40	67	109			
3.70	37	70	7.50	67	109			
3.80	41	75	7.60	73	117			
3.90	41	75	7.70	73	117			
4.00	41	75	7.80	73	117			
4.10	41	75	7.90	73	117			
4.20	41	75	8.00	73	117			
4.30	45	80	8.10	73	117			
4.40	45	80	8.20	73	117			

Bohrreibahle Asycut
Foret alésoir Asycut
Punta alesatore Asycut
Drill reamer Asycut

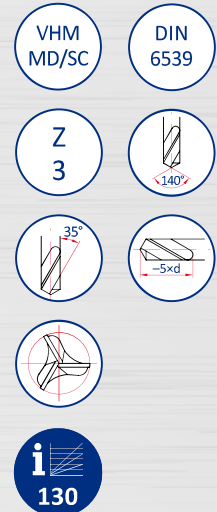
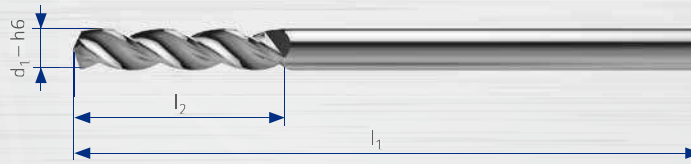
Art. 50840



d ₁ mm	l ₂ mm	l ₁ mm	d ₁ mm	l ₂ mm	l ₁ mm	d ₁ mm	l ₂ mm	l ₁ mm
2.00	11.50	38	5.80	27.00	66	9.60	41.00	89
2.10	11.50	38	5.90	27.00	66	9.70	41.00	89
2.20	12.50	40	6.00	27.00	66	9.80	41.00	89
2.30	12.50	40	6.10	30.00	70	9.90	41.00	89
2.40	13.50	43	6.20	30.00	70	10.00	41.00	89
2.50	13.50	43	6.30	30.00	70	10.20	41.00	89
2.60	13.50	43	6.40	30.00	70	10.50	41.00	89
2.70	15.50	46	6.50	30.00	70	11.00	45.00	95
2.80	15.50	46	6.60	30.00	70	11.50	45.00	95
2.90	15.50	46	6.70	30.00	70	12.00	49.00	102
3.00	15.50	46	6.80	33.00	74	12.50	49.00	102
3.10	17.50	49	6.90	33.00	74	13.00	49.00	102
3.20	17.50	49	7.00	33.00	74	13.50	52.00	107
3.30	17.50	49	7.10	33.00	74	14.00	52.00	107
3.40	19.50	52	7.20	33.00	74			
3.50	19.50	52	7.30	33.00	74			
3.60	19.50	52	7.40	33.00	74			
3.70	19.50	52	7.50	33.00	74			
3.80	21.50	55	7.60	36.00	79			
3.90	21.50	55	7.70	36.00	79			
4.00	21.50	55	7.80	36.00	79			
4.10	21.50	55	7.90	36.00	79			
4.20	21.50	55	8.00	36.00	79			
4.30	23.00	58	8.10	36.00	79			
4.40	23.00	58	8.20	36.00	79			
4.50	23.00	58	8.30	36.00	79			
4.60	23.00	58	8.40	36.00	79			
4.70	23.00	58	8.50	36.00	79			
4.80	25.00	62	8.60	39.00	84			
4.90	25.00	62	8.70	39.00	84			
5.00	25.00	62	8.80	39.00	84			
5.10	25.00	62	8.90	39.00	84			
5.20	25.00	62	9.00	39.00	84			
5.30	25.00	62	9.10	39.00	84			
5.40	27.00	66	9.20	39.00	84			
5.50	27.00	66	9.30	39.00	84			
5.60	27.00	66	9.40	39.00	84			
5.70	27.00	66	9.50	39.00	84			

Bohrreibahle Tricut
Foret alésoir Tricut
Punta alesatore Tricut
Drill reamer Tricut

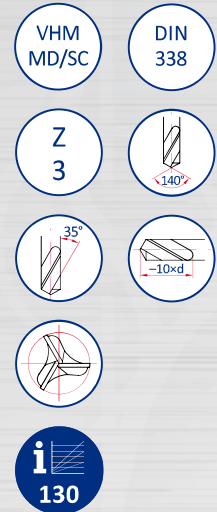
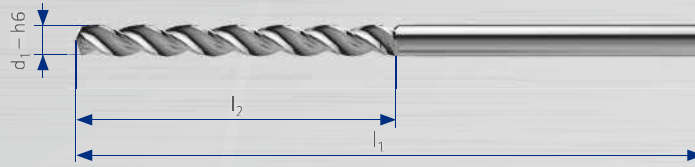
Art. 55654



d ₁ mm	l ₂ mm	l ₁ mm	d ₁ mm	l ₂ mm	l ₁ mm	d ₁ mm	l ₂ mm	l ₁ mm	
1.00	6.0	26	4.60	22.5	58	7.938	5/16"	34.0	79
1.10	6.5	28	4.70	22.5	58	8.00	34.0	79	
1.20	7.5	30	4.763	3/16"	24.5	62	8.10	34.0	79
1.30	7.5	30	4.80	24.5	62	8.20	34.0	79	
1.40	8.5	32	4.90	24.5	62	8.30	34.0	79	
1.50	8.5	32	5.00	24.5	62	8.40	34.0	79	
1.60	9.5	34	5.10	24.5	62	8.50	34.0	79	
1.70	9.5	34	5.20	24.5	62	8.60	36.5	84	
1.80	10.5	36	5.30	24.5	62	8.70	36.5	84	
1.90	10.5	36	5.40	26.0	66	8.80	36.5	84	
2.00	11.5	38	5.50	26.0	66	8.90	36.5	84	
2.10	11.5	38	5.556	7/32"	26.0	66	9.00	36.5	84
2.20	12.5	40	5.60	26.0	66	9.10	36.5	84	
2.30	12.5	40	5.70	26.0	66	9.20	36.5	84	
2.40	13.5	43	5.80	26.0	66	9.30	36.5	84	
2.50	13.5	43	5.90	26.0	66	9.40	36.5	84	
2.60	13.5	43	6.00	26.0	66	9.50	36.5	84	
2.70	15.5	46	6.10	28.5	70	9.525	3/8"	39.0	89
2.80	15.5	46	6.20	28.5	70	9.60	39.0	89	
2.90	15.5	46	6.30	28.5	70	9.70	39.0	89	
3.00	15.5	46	6.350	1/4"	28.5	70	9.80	39.0	89
3.10	17.0	49	6.40	28.5	70	9.90	39.0	89	
3.175	1/8"	17.0	6.50	28.5	70	10.00	39.0	89	
3.20	17.0	49	6.60	28.5	70	10.20	39.0	89	
3.30	17.0	49	6.70	28.5	70	10.50	39.0	89	
3.40	19.0	52	6.80	31.0	74	11.00	43.0	95	
3.50	19.0	52	6.90	31.0	74	11.113	7/16"	43.0	95
3.60	19.0	52	7.00	31.0	74	11.50	43.0	95	
3.70	19.0	52	7.10	31.0	74	12.00	47.0	102	
3.80	21.0	55	7.144	9/32"	31.0	74	12.50	47.0	102
3.90	21.0	55	7.20	31.0	74	12.700	1/2"	47.0	102
3.969	5/32"	21.0	7.30	31.0	74	13.00	47.0	102	
4.00	21.0	55	7.40	31.0	74	13.50	50.0	107	
4.10	21.0	55	7.50	31.0	74	14.00	50.0	107	
4.20	21.0	55	7.60	34.0	79				
4.30	22.5	58	7.70	34.0	79				
4.40	22.5	58	7.80	34.0	79				
4.50	22.5	58	7.90	34.0	79				

Bohrreibahle Tricut
Foret alésoir Tricut
Punta alesatore Tricut
Drill reamer Tricut

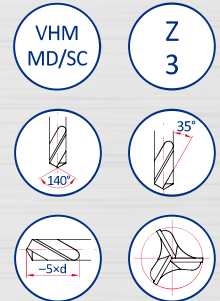
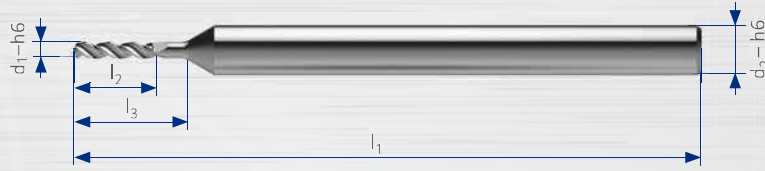
Art. 55338



d ₁	l ₂	l ₁	d ₁	l ₂	l ₁	d ₁	l ₂	l ₁
mm	mm	mm	mm	mm	mm	mm	mm	mm
1.00	11.5	34	4.80	50.0	86	8.60	78.0	125
1.10	13.0	36	4.90	50.0	86	8.70	78.0	125
1.20	15.0	38	5.00	50.0	86	8.80	78.0	125
1.30	15.0	38	5.10	50.0	86	8.90	78.0	125
1.40	17.0	40	5.20	50.0	86	9.00	78.0	125
1.50	17.0	40	5.30	50.0	86	9.10	78.0	125
1.60	19.0	43	5.40	55.0	93	9.20	78.0	125
1.70	19.0	43	5.50	55.0	93	9.30	78.0	125
1.80	21.0	46	5.60	55.0	93	9.40	78.0	125
1.90	21.0	46	5.70	55.0	93	9.50	78.0	125
2.00	22.0	49	5.80	55.0	93	9.60	84.0	133
2.10	22.0	49	5.90	55.0	93	9.70	84.0	133
2.20	25.0	53	6.00	55.0	93	9.80	84.0	133
2.30	25.0	53	6.10	60.0	101	9.90	84.0	133
2.40	28.0	57	6.20	60.0	101	10.00	84.0	133
2.50	28.0	57	6.30	60.0	101	10.20	84.0	133
2.60	28.0	57	6.40	60.0	101	10.50	84.0	133
2.70	31.0	61	6.50	60.0	101	11.00	91.0	142
2.80	31.0	61	6.60	60.0	101	11.50	91.0	142
2.90	31.0	61	6.70	60.0	101	12.00	98.0	151
3.00	31.0	61	6.80	66.0	109	12.50	98.0	151
3.10	34.0	65	6.90	66.0	109	13.00	98.0	151
3.20	34.0	65	7.00	66.0	109	13.50	105.0	160
3.30	34.0	65	7.10	66.0	109	14.00	105.0	160
3.40	37.0	70	7.20	66.0	109			
3.50	37.0	70	7.30	66.0	109			
3.60	37.0	70	7.40	66.0	109			
3.70	37.0	70	7.50	66.0	109			
3.80	41.0	75	7.60	72.0	117			
3.90	41.0	75	7.70	72.0	117			
4.00	41.0	75	7.80	72.0	117			
4.10	41.0	75	7.90	72.0	117			
4.20	41.0	75	8.00	72.0	117			
4.30	45.0	80	8.10	72.0	117			
4.40	45.0	80	8.20	72.0	117			
4.50	45.0	80	8.30	72.0	117			
4.60	45.0	80	8.40	72.0	117			
4.70	45.0	80	8.50	72.0	117			

Mikrotricut
Microtricut
Microtricut
Microtricut

Art. 55652



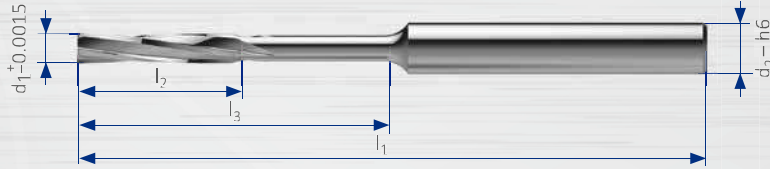
d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
0.20	1.00	1.50	38	3.00	0.58	2.90	3.40	38	3.00	0.96	4.80	5.30	38	3.00	1.34	6.70	9.50	38	3.00
0.21	1.05	1.50	38	3.00	0.59	2.95	3.40	38	3.00	0.97	4.85	5.30	38	3.00	1.35	6.75	9.50	38	3.00
0.22	1.10	1.60	38	3.00	0.60	3.00	3.50	38	3.00	0.98	4.90	5.40	38	3.00	1.36	6.80	9.50	38	3.00
0.23	1.15	1.60	38	3.00	0.61	3.05	3.50	38	3.00	0.99	4.95	5.40	38	3.00	1.37	6.85	9.50	38	3.00
0.24	1.20	1.70	38	3.00	0.62	3.10	3.60	38	3.00	1.00	5.00	6.50	38	3.00	1.38	6.90	9.50	38	3.00
0.25	1.25	1.70	38	3.00	0.63	3.15	3.60	38	3.00	1.01	5.05	6.50	38	3.00	1.39	6.95	9.50	38	3.00
0.26	1.30	1.80	38	3.00	0.64	3.20	3.70	38	3.00	1.02	5.10	6.50	38	3.00	1.40	7.00	9.50	38	3.00
0.27	1.35	1.80	38	3.00	0.65	3.25	3.70	38	3.00	1.03	5.15	6.50	38	3.00	1.41	7.05	9.50	38	3.00
0.28	1.40	1.90	38	3.00	0.66	3.30	3.80	38	3.00	1.04	5.20	6.50	38	3.00	1.42	7.10	9.50	38	3.00
0.29	1.45	1.90	38	3.00	0.67	3.35	3.80	38	3.00	1.05	5.25	6.50	38	3.00	1.43	7.15	9.50	38	3.00
0.30	1.50	2.00	38	3.00	0.68	3.40	3.90	38	3.00	1.06	5.30	6.50	38	3.00	1.44	7.20	9.50	38	3.00
0.31	1.55	2.00	38	3.00	0.69	3.45	3.90	38	3.00	1.07	5.35	7.50	38	3.00	1.45	7.25	9.50	38	3.00
0.32	1.60	2.10	38	3.00	0.70	3.50	4.00	38	3.00	1.08	5.40	7.50	38	3.00	1.46	7.30	9.50	38	3.00
0.33	1.65	2.10	38	3.00	0.71	3.55	4.00	38	3.00	1.09	5.45	7.50	38	3.00	1.47	7.35	9.50	38	3.00
0.34	1.70	2.20	38	3.00	0.72	3.60	4.10	38	3.00	1.10	5.50	7.50	38	3.00	1.48	7.40	9.50	38	3.00
0.35	1.75	2.20	38	3.00	0.73	3.65	4.10	38	3.00	1.11	5.55	7.50	38	3.00	1.49	7.45	9.50	38	3.00
0.36	1.80	2.30	38	3.00	0.74	3.70	4.20	38	3.00	1.12	5.60	7.50	38	3.00	1.50	7.50	9.50	38	3.00
0.37	1.85	2.30	38	3.00	0.75	3.75	4.20	38	3.00	1.13	5.65	7.50	38	3.00	1.51	7.55	10.50	38	3.00
0.38	1.90	2.40	38	3.00	0.76	3.80	4.30	38	3.00	1.14	5.70	7.50	38	3.00	1.52	7.60	10.50	38	3.00
0.39	1.95	2.40	38	3.00	0.77	3.85	4.30	38	3.00	1.15	5.75	7.50	38	3.00	1.53	7.65	10.50	38	3.00
0.40	2.00	2.50	38	3.00	0.78	3.90	4.40	38	3.00	1.16	5.80	7.50	38	3.00	1.54	7.70	10.50	38	3.00
0.41	2.05	2.50	38	3.00	0.79	3.95	4.40	38	3.00	1.17	5.85	7.50	38	3.00	1.55	7.75	10.50	38	3.00
0.42	2.10	2.60	38	3.00	0.80	4.00	4.50	38	3.00	1.18	5.90	8.50	38	3.00	1.56	7.80	10.50	38	3.00
0.43	2.15	2.60	38	3.00	0.81	4.05	4.50	38	3.00	1.19	5.95	8.50	38	3.00	1.57	7.85	10.50	38	3.00
0.44	2.20	2.70	38	3.00	0.82	4.10	4.60	38	3.00	1.20	6.00	8.50	38	3.00	1.58	7.90	10.50	38	3.00
0.45	2.25	2.70	38	3.00	0.83	4.15	4.60	38	3.00	1.21	6.05	8.50	38	3.00	1.59	7.95	10.50	38	3.00
0.46	2.30	2.80	38	3.00	0.84	4.20	4.70	38	3.00	1.22	6.10	8.50	38	3.00	1.60	8.00	10.50	38	3.00
0.47	2.35	2.80	38	3.00	0.85	4.25	4.70	38	3.00	1.23	6.15	8.50	38	3.00	1.61	8.05	10.50	38	3.00
0.48	2.40	2.90	38	3.00	0.86	4.30	4.80	38	3.00	1.24	6.20	8.50	38	3.00	1.62	8.10	10.50	38	3.00
0.49	2.45	2.90	38	3.00	0.87	4.35	4.80	38	3.00	1.25	6.25	8.50	38	3.00	1.63	8.15	10.50	38	3.00
0.50	2.50	3.00	38	3.00	0.88	4.40	4.90	38	3.00	1.26	6.30	8.50	38	3.00	1.64	8.20	10.50	38	3.00
0.51	2.55	3.00	38	3.00	0.89	4.45	4.90	38	3.00	1.27	6.35	8.50	38	3.00	1.65	8.25	10.50	38	3.00
0.52	2.60	3.10	38	3.00	0.90	4.50	5.00	38	3.00	1.28	6.40	8.50	38	3.00	1.66	8.30	10.50	38	3.00
0.53	2.65	3.10	38	3.00	0.91	4.55	5.00	38	3.00	1.29	6.45	8.50	38	3.00	1.67	8.35	10.50	38	3.00
0.54	2.70	3.20	38	3.00	0.92	4.60	5.10	38	3.00	1.30	6.50	8.50	38	3.00	1.68	8.40	10.50	38	3.00
0.55	2.75	3.20	38	3.00	0.93	4.65	5.10	38	3.00	1.31	6.55	8.50	38	3.00	1.69	8.45	10.50	38	3.00
0.56	2.80	3.30	38	3.00	0.94	4.70	5.20	38	3.00	1.32	6.60	8.50	38	3.00	1.70	8.50	10.50	38	3.00
0.57	2.85	3.30	38	3.00	0.95	4.75	5.20	38	3.00	1.33	6.65	9.50	38	3.00	1.71	8.55	11.50	38	3.00

d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	d ₁	l ₂	l ₃	l ₁	d ₂	
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1.72	8.60	11.50	38	3.00	2.04	10.20	12.50	38	3.00	2.36	11.80	13.50	38	3.00	2.68	13.40	16.50	38	3.00	
1.73	8.65	11.50	38	3.00	2.05	10.25	12.50	38	3.00	2.37	11.85	14.50	38	3.00	2.69	13.45	16.50	38	3.00	
1.74	8.70	11.50	38	3.00	2.06	10.30	12.50	38	3.00	2.38	11.90	14.50	38	3.00	2.70	13.50	16.50	38	3.00	
1.75	8.75	11.50	38	3.00	2.07	10.35	12.50	38	3.00	2.39	11.95	14.50	38	3.00	2.71	13.55	16.50	38	3.00	
1.76	8.80	11.50	38	3.00	2.08	10.40	12.50	38	3.00	2.40	12.00	14.50	38	3.00	2.72	13.60	16.50	38	3.00	
1.77	8.85	11.50	38	3.00	2.09	10.45	12.50	38	3.00	2.41	12.05	14.50	38	3.00	2.73	13.65	16.50	38	3.00	
1.78	8.90	11.50	38	3.00	2.10	10.50	12.50	38	3.00	2.42	12.10	14.50	38	3.00	2.74	13.70	16.50	38	3.00	
1.79	8.95	11.50	38	3.00	2.11	10.55	12.50	38	3.00	2.43	12.15	14.50	38	3.00	2.75	13.75	16.50	38	3.00	
1.80	9.00	11.50	38	3.00	2.12	10.60	12.50	38	3.00	2.44	12.20	14.50	38	3.00	2.76	13.80	16.50	38	3.00	
1.81	9.05	11.50	38	3.00	2.13	10.65	13.50	38	3.00	2.45	12.25	14.50	38	3.00	2.77	13.85	16.50	38	3.00	
1.82	9.10	11.50	38	3.00	2.14	10.70	13.50	38	3.00	2.46	12.30	14.50	38	3.00	2.78	13.90	16.50	38	3.00	
1.83	9.15	11.50	38	3.00	2.15	10.75	13.50	38	3.00	2.47	12.35	14.50	38	3.00	2.79	13.95	16.50	38	3.00	
1.84	9.20	11.50	38	3.00	2.16	10.80	13.50	38	3.00	2.48	12.40	14.50	38	3.00	2.80	14.00	16.50	38	3.00	
1.85	9.25	11.50	38	3.00	2.17	10.85	13.50	38	3.00	2.49	12.45	14.50	38	3.00	2.81	14.05	16.50	38	3.00	
1.86	9.30	11.50	38	3.00	2.18	10.90	13.50	38	3.00	2.50	12.50	14.50	38	3.00	2.82	14.10	16.50	38	3.00	
1.87	9.35	11.50	38	3.00	2.19	10.95	13.50	38	3.00	2.51	12.55	14.50	38	3.00	2.83	14.15	16.50	38	3.00	
1.88	9.40	11.50	38	3.00	2.20	11.00	13.50	38	3.00	2.52	12.60	14.50	38	3.00	2.84	14.20	16.50	38	3.00	
1.89	9.45	11.50	38	3.00	2.21	11.05	13.50	38	3.00	2.53	12.65	14.50	38	3.00	2.85	14.25	16.50	38	3.00	
1.90	9.50	11.50	38	3.00	2.22	11.10	13.50	38	3.00	2.54	12.70	14.50	38	3.00	2.86	14.30	16.50	38	3.00	
1.91	9.55	12.50	38	3.00	2.23	11.15	13.50	38	3.00	2.55	12.75	14.50	38	3.00	2.87	14.35	16.50	38	3.00	
1.92	9.60	12.50	38	3.00	2.24	11.20	13.50	38	3.00	2.56	12.80	14.50	38	3.00	2.88	14.40	16.50	38	3.00	
1.93	9.65	12.50	38	3.00	2.25	11.25	13.50	38	3.00	2.57	12.85	14.50	38	3.00	2.89	14.45	16.50	38	3.00	
1.94	9.70	12.50	38	3.00	2.26	11.30	13.50	38	3.00	2.58	12.90	14.50	38	3.00	2.90	14.50	16.50	38	3.00	
1.95	9.75	12.50	38	3.00	2.27	11.35	13.50	38	3.00	2.59	12.95	14.50	38	3.00	2.91	14.55	16.50	38	3.00	
1.96	9.80	12.50	38	3.00	2.28	11.40	13.50	38	3.00	2.60	13.00	14.50	38	3.00	2.92	14.60	16.50	38	3.00	
1.97	9.85	12.50	38	3.00	2.29	11.45	13.50	38	3.00	2.61	13.05	14.50	38	3.00	2.93	14.65	16.50	38	3.00	
1.98	9.90	12.50	38	3.00	2.30	11.50	13.50	38	3.00	2.62	13.10	14.50	38	3.00	2.94	14.70	16.50	38	3.00	
1.99	9.95	12.50	38	3.00	2.31	11.55	13.50	38	3.00	2.63	13.15	14.50	38	3.00	2.95	14.75	16.50	38	3.00	
2.00	10.00	12.50	38	3.00	2.32	11.60	13.50	38	3.00	2.64	13.20	14.50	38	3.00	2.96	14.80	16.50	38	3.00	
2.01	10.05	12.50	38	3.00	2.33	11.65	13.50	38	3.00	2.65	13.25	14.50	38	3.00	2.97	14.85	16.50	38	3.00	
2.02	10.10	12.50	38	3.00	2.34	11.70	13.50	38	3.00	2.66	13.30	16.50	38	3.00	2.98	14.90	16.50	38	3.00	
2.03	10.15	12.50	38	3.00	2.35	11.75	13.50	38	3.00	2.67	13.35	16.50	38	3.00	2.99	14.95	16.50	38	3.00	

Reibahle
Alésoir
Alesatore
Reamer

Art. 58000

- P1-3
- M1,2
- K1,2
- N2-5
- S1



- VHM
MD/SC
- Z
3-6
-
-
- right
right



\emptyset	d_1	l_2	l_3	l_1	d_2	z
mm	mm	mm	mm	mm	mm	
1.0-P7	0.987	8.00	16.00	48	3.00	3
1.0-H7	1.005	8.00	16.00	48	3.00	3
1.0-F7	1.011	8.00	16.00	48	3.00	3
	1.102	8.00	16.00	48	3.00	3
	1.115	8.00	16.00	48	3.00	3
	1.255	8.00	16.00	48	3.00	3
	1.480	10.00	20.00	52	3.00	3
	1.679	11.00	22.00	54	3.00	3
	1.690	11.00	22.00	54	3.00	3
	1.692	11.00	22.00	54	3.00	3
	1.695	11.00	22.00	54	3.00	3
	1.697	11.00	22.00	54	3.00	3
	1.701	11.00	22.00	54	3.00	3
	1.790	11.00	22.00	54	3.00	3
	1.985	11.00	22.00	54	3.00	4
2.0-P7	1.987	11.00	22.00	54	3.00	4
	1.995	11.00	22.00	54	3.00	4
2.0-H7	2.005	11.00	22.00	54	3.00	4
2.0-F7	2.011	11.00	22.00	54	3.00	4
	2.015	11.00	22.00	54	3.00	4
	2.040	11.00	22.00	54	3.00	4
	2.240	12.00	24.00	56	3.00	4
	2.285	12.00	24.00	56	3.00	4
	2.483	14.00	26.00	58	3.00	4
	2.970	15.00	30.00	60	3.00	4
	2.980	15.00	30.00	60	3.00	4
3.0-P7	2.987	15.00	30.00	60	3.00	4
	2.995	15.00	30.00	60	3.00	4
3.0-H7	3.005	15.00	30.00	60	3.00	4
3.0-F7	3.011	15.00	30.00	60	3.00	4
	3.020	15.00	30.00	60	3.00	4
	3.030	15.00	30.00	60	3.00	4
	3.045	15.00	30.00	60	3.00	4
	3.050	15.00	30.00	60	3.00	4
	3.060	15.00	30.00	60	3.00	4
	3.870	19.00	38.00	76	6.00	4
	3.970	19.00	38.00	76	6.00	6
	3.980	19.00	38.00	76	6.00	6

\emptyset	d_1	l_2	l_3	l_1	d_2	z
mm	mm	mm	mm	mm	mm	
4.0-P7	3.986	19.00	38.00	76	6.00	6
	3.992	19.00	38.00	76	6.00	6
4.0-H7	4.006	19.00	38.00	76	6.00	6
4.0-F7	4.016	19.00	38.00	76	6.00	6
	4.020	19.00	38.00	76	6.00	6
	4.025	19.00	38.00	76	6.00	6
	4.030	19.00	38.00	76	6.00	6
	4.040	19.00	38.00	76	6.00	6
	4.970	23.00	46.00	84	6.00	6
	4.980	23.00	46.00	84	6.00	6
5.0-P7	4.986	23.00	46.00	84	6.00	6
5.0-H7	5.006	23.00	46.00	84	6.00	6
5.0-F7	5.018	23.00	46.00	84	6.00	6
	5.020	23.00	46.00	84	6.00	6
	5.030	23.00	46.00	84	6.00	6
	5.206	23.00	46.00	84	6.00	6
	5.220	23.00	46.00	84	6.00	6
	5.970	26.00	52.00	90	6.00	6
	5.980	26.00	52.00	90	6.00	6
6.0-P7	5.986	26.00	52.00	90	6.00	6
6.0-H7	6.006	26.00	52.00	90	6.00	6
6.0-F7	6.018	26.00	52.00	90	6.00	6
	6.020	26.00	52.00	90	6.00	6
	6.030	26.00	52.00	90	6.00	6

Zwischendurchmesser auf Anfrage erhältlich

Diamètre intermédiaire sur demande

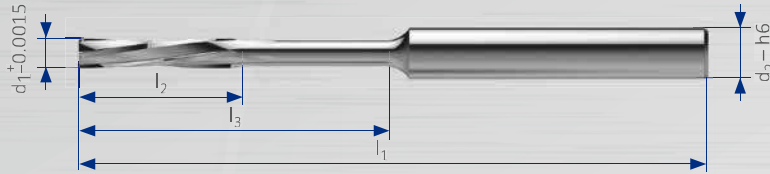
Diametri intermediari su richiesta

Diameter intermediate on request

**Reibahle
Alésoir
Alesatore
Reamer**

Art. 58500

- P1-3
- M1,2
- K1,2
- N2-5
- S1



- VHM
MD/SC
- Z
3-6
- 10°
- 8xd
- right
left



	∅	d ₁	l ₂	l ₃	l ₁	d ₂	z
	mm	mm	mm	mm	mm	mm	
1.0-P7	0.987	8.00	16.00	48	3.00	3	
1.0-H7	1.005	8.00	16.00	48	3.00	3	
1.0-F7	1.011	8.00	16.00	48	3.00	3	
	1.102	8.00	16.00	48	3.00	3	
	1.115	8.00	16.00	48	3.00	3	
	1.255	8.00	16.00	48	3.00	3	
	1.480	10.00	20.00	52	3.00	3	
	1.679	11.00	22.00	54	3.00	3	
	1.690	11.00	22.00	54	3.00	3	
	1.692	11.00	22.00	54	3.00	3	
	1.695	11.00	22.00	54	3.00	3	
	1.697	11.00	22.00	54	3.00	3	
	1.701	11.00	22.00	54	3.00	3	
	1.790	11.00	22.00	54	3.00	3	
	1.985	11.00	22.00	54	3.00	4	
2.0-P7	1.987	11.00	22.00	54	3.00	4	
	1.995	11.00	22.00	54	3.00	4	
2.0-H7	2.005	11.00	22.00	54	3.00	4	
2.0-F7	2.011	11.00	22.00	54	3.00	4	
	2.015	11.00	22.00	54	3.00	4	
	2.040	11.00	22.00	54	3.00	4	
	2.240	12.00	24.00	56	3.00	4	
	2.285	12.00	24.00	56	3.00	4	
	2.483	14.00	26.00	58	3.00	4	
	2.970	15.00	30.00	60	3.00	4	
	2.980	15.00	30.00	60	3.00	4	
3.0-P7	2.987	15.00	30.00	60	3.00	4	
	2.995	15.00	30.00	60	3.00	4	
3.0-H7	3.005	15.00	30.00	60	3.00	4	
3.0-F7	3.011	15.00	30.00	60	3.00	4	
	3.020	15.00	30.00	60	3.00	4	
	3.030	15.00	30.00	60	3.00	4	
	3.045	15.00	30.00	60	3.00	4	
	3.050	15.00	30.00	60	3.00	4	
	3.060	15.00	30.00	60	3.00	4	
	3.870	19.00	38.00	76	6.00	4	
	3.970	19.00	38.00	76	6.00	6	
	3.980	19.00	38.00	76	6.00	6	

	∅	d ₁	l ₂	l ₃	l ₁	d ₂	z
	mm	mm	mm	mm	mm	mm	
4.0-P7	3.986	19.00	38.00	76	6.00	6	
	3.992	19.00	38.00	76	6.00	6	
4.0-H7	4.006	19.00	38.00	76	6.00	6	
4.0-F7	4.016	19.00	38.00	76	6.00	6	
	4.020	19.00	38.00	76	6.00	6	
	4.025	19.00	38.00	76	6.00	6	
	4.030	19.00	38.00	76	6.00	6	
	4.040	19.00	38.00	76	6.00	6	
	4.970	23.00	46.00	84	6.00	6	
	4.980	23.00	46.00	84	6.00	6	
5.0-P7	4.986	23.00	46.00	84	6.00	6	
5.0-H7	5.006	23.00	46.00	84	6.00	6	
5.0-F7	5.018	23.00	46.00	84	6.00	6	
	5.020	23.00	46.00	84	6.00	6	
	5.030	23.00	46.00	84	6.00	6	
	5.206	23.00	46.00	84	6.00	6	
	5.220	23.00	46.00	84	6.00	6	
	5.970	26.00	52.00	90	6.00	6	
	5.980	26.00	52.00	90	6.00	6	
6.0-P7	5.986	26.00	52.00	90	6.00	6	
6.0-H7	6.006	26.00	52.00	90	6.00	6	
6.0-F7	6.018	26.00	52.00	90	6.00	6	
	6.020	26.00	52.00	90	6.00	6	
	6.030	26.00	52.00	90	6.00	6	

**Zwischendurchmesser
auf Anfrage erhältlich**

**Diamètre intermédiaire
sur demande**

**Diametri intermediari
su richiesta**

**Diameter intermediate
on request**