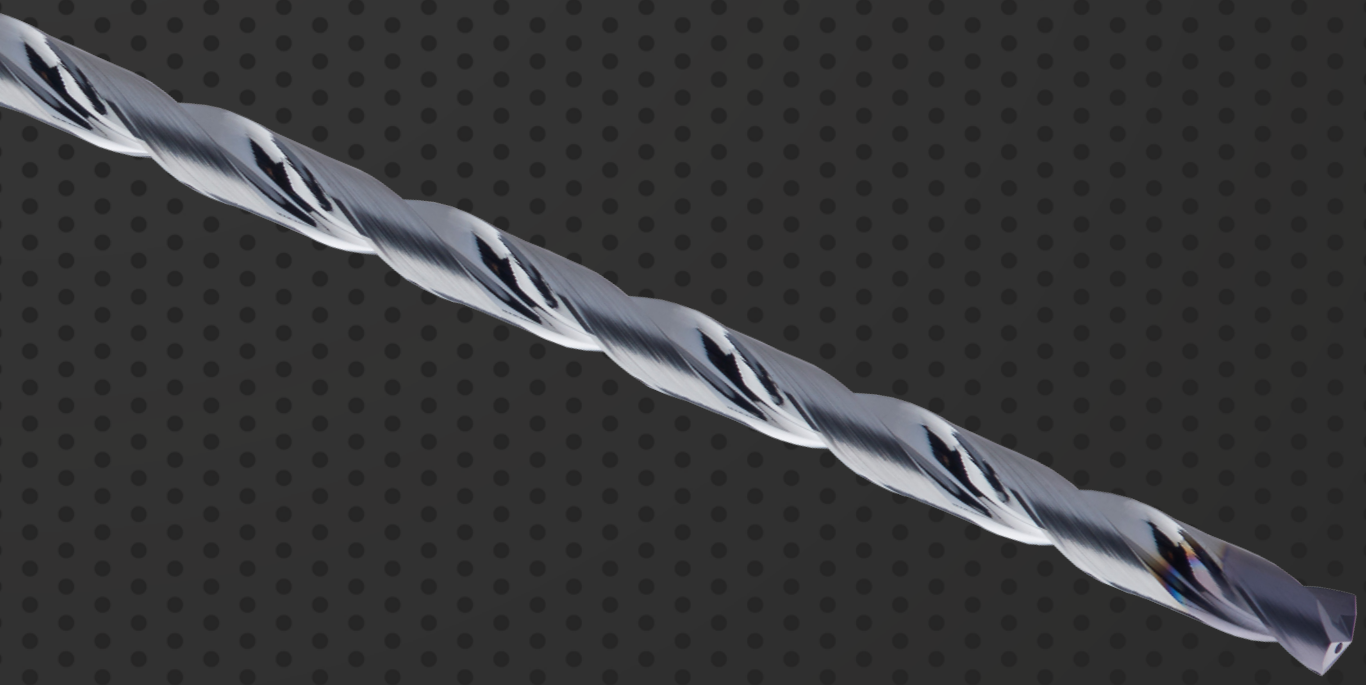
HPMT



DRILLS

DR Mini

High-performance micro long drills for P, M, N, K, S materials

Index - Drills, For 35 - 68 HRC

Suitable for Material Groups
Geeignet für die Materialgruppen
Adapté pour les matériaux
Adatto pee il materiale
适用于材料

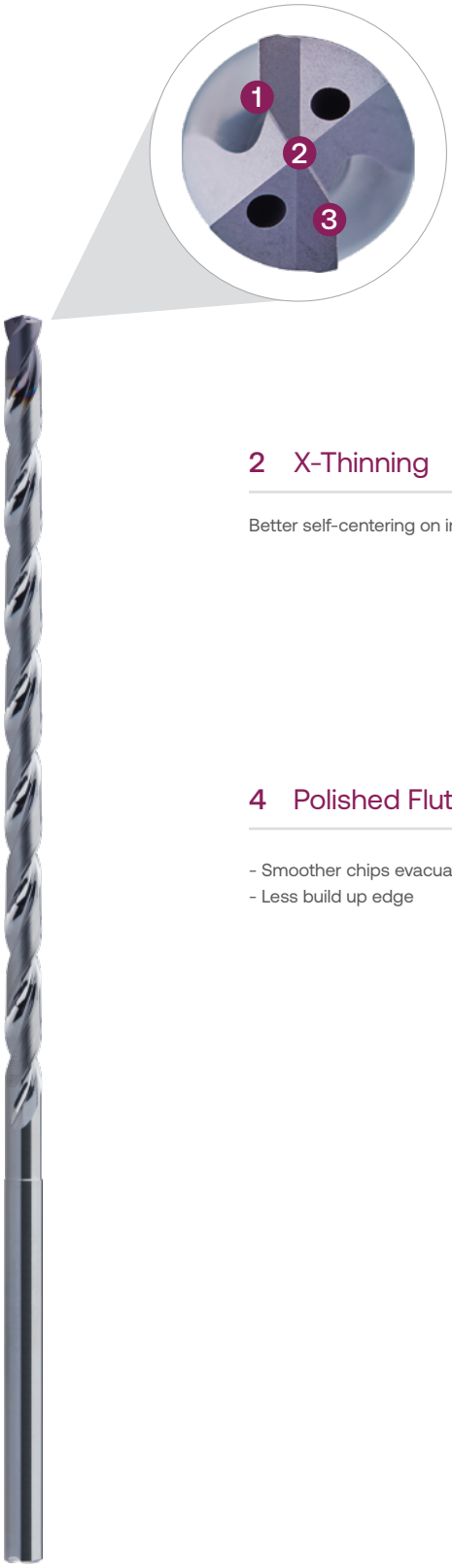
P M K N S H O

	EDP Number	Hardness		Type	No. Z	Helix Angle	Coating	Performance	Page Number
	662	≤ 35 HRC		DR NC 60°	2	30°	UC	G	443
	953			DR NC 60°	2	30°	B0819	G	443
	664			DR NC 90°	2	30°	UC	G	444
	955			DR NC 90°	2	30°	B0819	G	444
	666			DR NC 120°	2	30°	UC	G	445
	957			DR NC 120°	2	30°	B0819	G	445
	D09	Non Ferrous Metal		DR ALU OF - 3 x Ø	2	30°	UC	P	449
	D10			DR ALU OF - 5 x Ø	2	30°	UC	P	450
NEW	W16	≤ 35 HRC		EZ Drill - 3 x Ø	2	30°	T8090	G	454
NEW	W17			EZ Drill - 5 x Ø	2	30°	T8090	G	456
	D07			DR NiTiCo OF - 3 x Ø	2	30°	T8090	P	459
	D08			DR NiTiCo OF - 5 x Ø	2	30°	T8090	P	460
	C73	≤ 45 HRC		DR VA OF- 3 x Ø	2	30°	T8090	P	464
	C77			DR VA OF- 5 x Ø	2	30°	T8090	P	465
	W08			DR-S - 3 x Ø	2	30°	T8090	P	469
	W09			DR-S - 5 x Ø	2	30°	T8090	P	470
	W10			DR-S OF - 3 x Ø	2	30°	T8090	P	471
	W11			DR-S OF - 5 x Ø	2	30°	T8090	P	472
	H03			DR MINI OF - 5 x Ø, 8x Ø, 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø	2	30°	T8090	P	479
NEW	W05			DR-LX OF - 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø	2	30°	T8090	P	485
	F33			DR 45 SB OF - 8 x Ø	2	30°	T8090	P	493
	821	≤ 60 HRC		DR 60 - 5 x Ø	2	15°	D0120	P	497
	823			DR 60 - 3 x Ø	2	15°	D0120	P	498

G - General P - Performance

FEATURES & BENEFITS

DR Mini



1 Split Point Design

Provides self centering ability and reduced thrust

2 X-Thinning

Better self-centering on initial cutting

3 Straight Edge Profile

Shorter chip and reinforced cutting edge

4 Polished Flute

- Smoother chips evacuation
- Less build up edge

5 Suitable for Material

P K N M S

1. Kreuzanschliff
   Bietet Selbstzentrierung und reduzierten Axialdruck
2. X-Ausspitzung
   Bessere Selbstzentrierung beim Anschnitt
3. Gerades Kantenprofil
   Kürzerer Span und verstärkte Schneidkante
4. Polierte Schneiden
   Verbesserter problemloser Spänefluß
   Weniger Aufbauschneiden
5. Geeignet für die Materialgruppen P, K, N, M, S

1. 分割点设计
   提供自定心能力和减小推力。
2. X 变薄
   初始切割时更好的自定心能力。
3. 直边轮廓
   较短的碎屑和强化的切削刃。
4. 抛光槽
   更顺畅的排屑。
   更少的堆积边缘。
5. 适用于材料 P、K、N、M、S

1. 1.. Struttura del punto di ripartizione
   Offre capacità autocentranti e spinta ridotta
2. X-assottigliamento
   Miglior autocentraggio al taglio iniziale
3. Profilo dritto
   Trucioli più corti e angolo di taglio rinforzato
4. Scanalature altamente levigate
   Evacuazione dei trucioli più semplice
   Meno formazione di materiale di riporto
5. Adatto per il materiale P, K, N, M, S

1. Conception à affûtage croisé
   Permet une capacité de centrage automatique et une poussée réduite
2. Amincissement en X
   Meilleur auto-centrage à l'attaque du percage
3. Profil d'arête droite
   Copeaux plus courts et arête de coupe renforcée
4. Goujures hautement polies
   Évacuation des copeaux plus fluide
   Moins d'accumulation sur les arêtes
5. Adapté aux matériaux P, K, N, M, S

H03 BEST SELLER

HPMT

DR MINI OIL FEED MINIATURE TWIST DRILLS - 135° POINT ANGLE - 5 X Ø, 8X Ø, 12 X Ø, 15X Ø, 20X Ø, 25X Ø, 30X Ø

VHM DR MINI Kühlkanalbohrer nach 135° Spitzenwinkel, Schaft nach DIN 6535HA 5 x Ø, 8x Ø, 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø

Punte elicoidali DR MINI, con foro di lubrificazione, angolo di punta 135°, codolo DIN 6535HA- 5 x Ø, 8x Ø, 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø

Forets hélicoïdaux DR MINI à trous d'huile angle de pointe 135°, queue selon DIN 6535HA- 5 x Ø, 8x Ø, 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø

整体硬质合金 DR MINI 系列 内冷孔钻头-相等于2刃, 柄部标准DIN6535HA, 顶角135° 5 x Ø, 8x Ø, 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø

MG | λ= 30° | HPT T8090 TiALN

H03

Order Number	Dimension (mm)						T8090
	Hole Depth l2 / D	D (h7)	l 1	l 2	L	d2 (h6)	
H03 0100 5	5 x D	1.00	6.5	8.0	50	3	•
H03 0100 8	8 x D		9.5	11.0	50	3	•
H03 0100 12	12 x D		13.5	15.0	55	3	•
H03 0100 20	20 x D		21.5	23.0	65	3	•
H03 0100 25	25 x D		26.5	28.0	70	3	•
H03 0100 30	30 x D		31.5	33.0	75	3	•
H03 0100 5	5 x D	1.10	7.2	8.7	50	3	•
H03 0100 8	8 x D		10.5	12.0	50	3	○
H03 0100 12	12 x D		14.9	16.4	55	3	•
H03 0100 20	20 x D		23.7	25.2	65	3	○
H03 0100 25	25 x D		29.2	30.7	70	3	•
H03 0100 30	30 x D		34.7	36.2	75	3	○
H03 0120 5	5 x D	1.20	7.8	9.3	50	3	•
H03 0120 8	8 x D		11.4	12.9	50	3	•
H03 0120 12	12 x D		16.2	17.7	55	3	•
H03 0120 20	20 x D		25.8	27.3	65	3	•
H03 0120 25	25 x D		31.8	33.3	75	3	•
H03 0120 30	30 x D		37.8	39.3	75	3	•
H03 0130 5	5 x D	1.30	8.5	10.0	50	3	•
H03 0130 8	8 x D		12.4	13.9	50	3	○
H03 0130 12	12 x D		17.6	19.1	55	3	•
H03 0130 20	20 x D		28.0	29.5	65	3	•
H03 0130 25	25 x D		34.5	36.0	75	3	•
H03 0130 30	30 x D		41.0	42.5	85	3	•
H03 0140 5	5 x D	1.40	9.1	10.6	50	3	•
H03 0140 8	8 x D		13.3	14.8	50	3	•
H03 0140 12	12 x D		18.9	20.4	55	3	•
H03 0140 20	20 x D		30.1	31.6	65	3	•
H03 0140 25	25 x D		37.1	38.6	75	3	○
H03 0140 30	30 x D		44.1	45.6	85	3	•
H03 0150 5	5 x D	1.50	9.8	11.3	50	3	•
H03 0150 8	8 x D		14.3	15.8	50	3	•
H03 0150 12	12 x D		20.3	21.8	55	3	•
H03 0150 20	20 x D		32.3	33.8	75	3	•
H03 0150 25	25 x D		39.8	41.3	80	3	•
H03 0150 30	30 x D		47.3	48.8	85	3	•
H03 0160 5	5 x D	1.60	10.4	11.9	50	3	•
H03 0160 8	8 x D		15.2	16.7	50	3	•
H03 0160 12	12 x D		21.6	23.1	65	3	•
H03 0160 20	20 x D		34.4	35.9	75	3	•
H03 0160 25	25 x D		42.4	43.9	80	3	○
H03 0160 30	30 x D		50.4	51.9	90	3	•
H03 0170 5	5 x D	1.70	11.1	12.6	55	3	•
H03 0170 8	8 x D		16.2	17.7	60	3	•
H03 0170 12	12 x D		23.0	24.5	65	3	•
H03 0170 20	20 x D		36.6	38.1	75	3	○
H03 0170 25	25 x D		45.1	46.6	80	3	○
H03 0170 30	30 x D		53.6	55.1	90	3	○

Order Number	Dimension (mm)						T8090
	Hole Depth l2 / D	D (h7)	l 1	l 2	L	d2 (h6)	
H03 0180 5	5 x D	1.80	11.7	13.2	55	3	•
H03 0180 8	8 x D		17.1	18.6	60	3	•
H03 0180 12	12 x D		24.3	25.8	65	3	•
H03 0180 20	20 x D		38.7	40.2	75	3	•
H03 0180 25	25 x D		47.7	49.2	90	3	•
H03 0180 30	30 x D		56.7	58.2	100	3	•
H03 0190 5	5 x D	1.90	12.4	13.9	55	3	•
H03 0190 8	8 x D		18.1	19.6	60	3	•
H03 0190 12	12 x D		25.7	27.2	65	3	•
H03 0190 20	20 x D		40.9	42.4	75	3	○
H03 0190 25	25 x D		50.4	51.9	90	3	○
H03 0190 30	30 x D		59.9	61.4	100	3	○
H03 0200 5	5 x D	2.00	13.0	16.0	55	3	•
H03 0200 8	8 x D		19.0	22.0	60	3	•
H03 0200 12	12 x D		27.0	30.0	65	3	•
H03 0200 20	20 x D		43.0	46.0	82	3	•
H03 0200 25	25 x D		53.0	56.0	90	3	•
H03 0200 30	30 x D		63.0	66.0	100	3	•
H03 0210 5	5 x D	2.10	13.7	16.9	55	3	•
H03 0210 8	8 x D		20.0	23.2	60	3	•
H03 0210 12	12 x D		28.4	31.6	65	3	•
H03 0210 20 *	20 x D		45.2	48.4	82	3	○
H03 0210 25	25 x D		55.7	58.8	100	3	•
H03 0210 30	30 x D		66.2	69.3	110	3	•
H03 0220 5	5 x D	2.20	14.3	17.6	55	3	•
H03 0220 8	8 x D		20.9	24.2	60	3	•
H03 0220 12	12 x D		29.7	33.0	65	3	•
H03 0220 20	20 x D		47.3	50.6	82	3	•
H03 0220 25	25 x D		58.3	61.6	100	3	•
H03 0220 30	30 x D		69.3	72.6	110	3	•
H03 0230 5	5 x D	2.30	15.0	18.5	55	3	•
H03 0230 8	8 x D		21.9	25.4	60	3	•
H03 0230 12	12 x D		31.1	34.6	65	3	•
H03 0230 20	20 x D		49.5	53.0	100	3	○
H03 0230 25	25 x D		61.0	64.4	100	3	•
H03 0230 30	30 x D		72.5	75.9	110	3	•
H03 0240 5	5 x D	2.40	15.6	19.2	55	3	•
H03 0240 8	8 x D		22.8	26.4	60	3	•
H03 0240 12	12 x D		32.4	36.0	75	3	•
H03 0240 20	20 x D		51.6	55.2	100	3	•
H03 0240 25	25 x D		63.6	67.2	100	3	•
H03 0240 30 *	30 x D		75.6	79.2	120	3	•
H03 0250 5	5 x D	2.50	16.3	20.1	55	3	•
H03 0250 8	8 x D		23.8	27.6	60	3	•
H03 0250 12	12 x D		33.8	37.6	75	3	•
H03 0250 20	20 x D		53.8	57.6	100	3	•
H03 0250 25 *	25 x D		66.3	70.0	110	3	•
H03 0250 30	30 x D		78.8	82.5	120	3	•

* - DIN 6535

cont'd ▸

Material Group | Material-Gruppe | Groupe Matiere | Gruppo Materiali | 材质主类

N01	N02	N03	K01	K02	P01	P02	P03	M01	M02	S01	S02	S03	H01	H02	O01	O02
•	•	•	•	•	•	•	•	•	•	•	•					

Cutting Parameter: 481 - 482

H03 BEST SELLER

HPMT

DR MINI OIL FEED MINIATURE TWIST DRILLS - 135° POINT ANGLE - 5 X Ø, 8X Ø, 12 X Ø, 15X Ø, 20X Ø, 25X Ø, 30X Ø

VHM DR MINI Kühlkanalbohrer nach 135° Spitzenwinkel, Schaft nach DIN 6535HA 5 x Ø, 8x Ø, Ø12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø

Punte elicoidali DR MINI, con foro di lubrificazione, angolo di punta 135°, codolo DIN 6535HA- 5 x Ø, 8x Ø, 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø

Forets hélicoïdaux DR MINI à trous d'huile angle de pointe 135°, queue selon DIN 6535HA- 5 x Ø, 8x Ø, 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø

整体硬质合金 DR MINI 系列 内冷孔钻头-相等于2刃, 柄部标准DIN6535HA, 顶角135° 5 x Ø, 8x Ø, 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø

MG | λ= 30° | HPT T8090 TiALN

H03

Order Number	Dimension (mm)						T8090
	Hole Depth l2 / D	D (h7)	l 1	l 2	L	d2 (h6)	
H03 0260 5	5 x D	2.60	16.9	20.8	55	3	•
H03 0260 8	8 x D		24.7	28.6	60	3	•
H03 0260 12	12 x D		35.1	39.0	75	3	•
H03 0260 20	20 x D		55.9	59.8	100	3	○
H03 0260 25	25 x D		68.9	72.8	110	3	•
H03 0260 30	30 x D		81.9	85.8	120	3	•
H03 0270 5	5 x D	2.70	17.6	21.7	55	3	•
H03 0270 8	8 x D		25.7	29.8	60	3	•
H03 0270 12	12 x D		36.5	40.6	75	3	•
H03 0270 20	20 x D		58.1	62.2	100	3	•
H03 0270 25	25 x D		71.6	75.6	110	3	•
H03 0270 30	30 x D		85.1	89.1	130	3	•
H03 0280 5	5 x D	2.80	18.2	22.4	55	3	•
H03 0280 8	8 x D		26.6	30.8	60	3	•
H03 0280 12	12 x D		37.8	42.0	75	3	•
H03 0280 20	20 x D		60.2	64.4	100	3	•
H03 0280 25	25 x D		74.2	78.4	110	3	•
H03 0280 30	30 x D		88.2	92.4	130	3	•
H03 0290 5	5 x D	2.90	18.9	23.3	55	3	•
H03 0290 8	8 x D		27.6	32.0	60	3	•
H03 0290 12	12 x D		39.2	43.6	75	3	•
H03 0290 20	20 x D		61.4	65.8	100	3	•
H03 0290 25	25 x D		76.9	81.2	120	3	•
H03 0290 30	30 x D		91.4	95.7	130	3	•
H03 0300 5	5 x D	3.00	19.5	24.0	55	3	•
H03 0300 8	8 x D		28.5	33.0	60	3	•
H03 0300 12	12 x D		40.5	45.0	75	3	•
H03 0300 20	20 x D		64.5	69.0	100	3	•
H03 0300 25	25 x D		79.5	84.0	120	3	•
H03 0300 30	30 x D		94.5	99.0	130	3	•

Order Number	Dimension (mm)						T8090
	Hole Depth l2 / D	D (h7)	l 1	l 2	L	d2 (h6)	

Material Group | Material-Gruppe | Groupe Matiere | Gruppo Materiali | 材质主类

N01	N02	N03	K01	K02	P01	P02	P03	M01	M02	S01	S02	S03	H01	H02	O01	O02
●	●	●	●	●	●	●	●	●	●	●	●					

Cutting Parameter: 481 - 482

Note: These recommended cutting data indicators are just for reference. They should be adjusted according to the different cutting condition

P M K N S | P K

DR Mini Oil Feed Twist Drill - Point Angle 135°, 5 × D, 8 × D - H03

Working Material	N						K				S	
	Wrought Aluminium		Cast Aluminium		Copper Alloy		Grey Cast Iron		Ductile Cast Iron		Titanium alloy	
Properties	Si < 9%		Si ≥ 9%		-		-		-		-	
D	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn
1.0		0.017		0.018		0.016		0.018		0.016		0.013
1.5		0.026		0.026		0.024		0.027		0.024		0.019
2.0	145	0.035	125	0.035	115	0.032	85	0.035	65	0.032	30	0.025
2.5		0.043		0.044		0.040		0.044		0.040		0.031
3.0		0.052		0.053		0.049		0.053		0.048		0.038

DR Mini Oil Feed Twist Drill - Point Angle 135°, 5 × D, 8 × D - H03

Working Material	P						M				S	
	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Nickel Alloy	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		-	
D	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn
1.0		0.017		0.016		0.014		0.015		0.014		0.009
1.5		0.026		0.024		0.022		0.022		0.021		0.016
2.0	90	0.035	80	0.031	65	0.029	60	0.029	40	0.028	20	0.025
2.5		0.043		0.039		0.036		0.036		0.035		0.035
3.0		0.052		0.047		0.043		0.044		0.042		0.045

DR Mini Oil Feed Twist Drill - Point Angle 135°, 12 × D, 20 × D - H03

Working Material	N						K				S	
	Wrought Aluminium		Cast Aluminium		Copper Alloy		Grey Cast Iron		Ductile Cast Iron		Titanium alloy	
Properties	Si < 9%		Si ≥ 9%		-		-		-		-	
D	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn
1.0		0.016		0.016		0.015		0.014		0.014		0.010
1.5		0.025		0.024		0.022		0.021		0.021		0.016
2.0	130	0.033	115	0.032	105	0.029	80	0.028	55	0.028	30	0.021
2.5		0.041		0.039		0.037		0.035		0.035		0.026
3.0		0.049		0.047		0.044		0.042		0.042		0.031

DR Mini Oil Feed Twist Drill - Point Angle 135°, 12 × D, 20 × D - H03

Working Material	P						M				S	
	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Nickel Alloy	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		-	
D	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn
1.0		0.014		0.014		0.010		0.010		0.009		0.010
1.5		0.021		0.020		0.015		0.015		0.014		0.016
2.0	85	0.028	65	0.027	55	0.020	50	0.020	40	0.019	15	0.025
2.5		0.035		0.034		0.025		0.025		0.024		0.035
3.0		0.042		0.041		0.031		0.030		0.028		0.044

Note: These recommended cutting data indicators are just for reference. They should be adjusted according to the different cutting condition

P M K N S P K

DR Mini Oil Feed Twist Drill - Point Angle 135°, 25 × D, 30 × D - H03

Working Material	N						K				S	
	Wrought Aluminium		Cast Aluminium		Copper Alloy		Grey Cast Iron		Ductile Cast Iron		Titanium alloy	
Properties	Si < 9%		Si ≥ 9%		-		-		-		-	
D	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn
1.0		0.014		0.014		0.012		0.010		0.013		0.006
1.5		0.021		0.021		0.018		0.015		0.019		0.009
2.0	125	0.028	105	0.027	95	0.024	75	0.020	50	0.025	30	0.013
2.5		0.035		0.034		0.030		0.025		0.031		0.015
3.0		0.042		0.041		0.036		0.030		0.037		0.019

DR Mini Oil Feed Twist Drill - Point Angle 135°, 25 × D, 30 × D - H03

Working Material	P						M				S	
	Carbon Steel		Alloy Steel		Prehardened Steel		Stainless Steel		Stainless Steel		Nickel Alloy	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45		High Machinability		Low Machinability		-	
D	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn	Vc	fn
1.0		0.010		0.011		0.008		0.007		0.007		0.008
1.5		0.015		0.016		0.011		0.010		0.011		0.013
2.0	80	0.020	60	0.022	50	0.015	45	0.014	35	0.014	15	0.021
2.5		0.025		0.027		0.019		0.017		0.018		0.030
3.0		0.031		0.033		0.022		0.021		0.021		0.038