

FEATURES & BENEFITS

DR-LX



3 Flexible Drilling

Able to drill reliably in continuous and peck drilling

1 Polished Flutes

Smoother chips evacuation and less built-up edge

2 Versatile Machining Condition

Able to drill reliably with various coolant pressure and cutting data

4 T8090 Tip Coating

Low friction, high wear resistance

5 State-of-the-Art Geometry

- For prolonged durability and excellent quality

Wider Flute Shape
- Better chip evacuation

Tougher Core Diameter
- Ensure chip can evacuate smooth yet rigid

GG Point Geometry
- Protect & Reduce Chipping

6 Suitable for Material





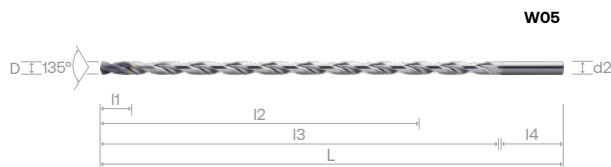
DR-LX SB OIL FEED TWIST DRILLS - 135° POINT ANGLE -12 X Ø, 15X Ø, 20X Ø, 25X Ø, 30X Ø

VHM DR-LX SB Kühlkanalbohrer nach 135° Spitzenwinkel, Schaft nach DIN 6535HA 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø

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

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

整体硬质合金 DR-LX SB 系列 内冷孔钻头- 相当于2刃, 柄部标准DIN6535HA, 顶角135° 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø



Order Number DIN 6535	Dimension (mm)								T8090
	Hole Depth I2 / D	D (h7)	I1	I2 (Max. Drilling Depth)	I3	I4	L	d2 (h6)	
W05 0310 12	12 x D	3.10	15.5	45	50	32	85	4	•
W05 0310 15	15 x D			50	55	32	90	4	◦
W05 0310 20	20 x D			64	69	32	105	4	◦
W05 0310 25	25 x D			79	83	32	120	4	◦
W05 0310 30	30 x D	3.20	16.0	94	99	32	135	4	◦
W05 0320 12	12 x D			45	50	32	85	4	•
W05 0330 12	12 x D			45	50	32	85	4	◦
W05 0340 12	12 x D			48	54	32	90	4	◦
W05 0350 12	12 x D	3.30	16.5	48	54	32	90	4	◦
W05 0350 15	15 x D			48	54	32	90	4	◦
W05 0350 20	20 x D			55	60	32	95	4	◦
W05 0350 25	25 x D			72	77	32	110	4	•
W05 0350 30	30 x D	3.40	17.0	89	94	32	130	4	◦
W05 0360 12	12 x D			89	94	32	130	4	◦
W05 0370 12	12 x D			106	111	32	145	4	◦
W05 0380 12	12 x D			48	54	32	90	4	◦
W05 0380 15	15 x D	3.60	18.0	48	54	32	90	4	◦
W05 0380 20	20 x D			48	54	32	90	4	◦
W05 0380 25	25 x D			57	64	32	100	4	◦
W05 0380 30	30 x D			57	64	32	100	4	◦
W05 0390 12	12 x D	3.70	18.5	96	102	32	135	4	◦
W05 0390 15	15 x D			115	121	32	155	4	◦
W05 0390 20	20 x D			127	133	34	170	5	◦
W05 0390 25	25 x D			57	64	34	105	5	◦
W05 0400 12	12 x D	3.80	19.0	57	64	34	105	5	◦
W05 0400 15	15 x D			64	70	34	105	5	◦
W05 0400 20	20 x D			64	70	34	105	5	◦
W05 0400 25	25 x D			64	70	34	105	5	◦
W05 0400 30	30 x D	4.00	20.0	67	74	34	110	5	◦
W05 0410 12	12 x D			67	74	34	110	5	◦
W05 0410 15	15 x D			67	74	34	110	5	◦
W05 0410 20	20 x D			67	74	34	110	5	◦
W05 0410 25	25 x D	4.10	20.5	67	74	34	110	5	◦
W05 0410 30	30 x D			67	74	34	110	5	◦
W05 0420 12	12 x D			67	74	34	110	5	◦
W05 0420 15	15 x D			67	74	34	110	5	◦
W05 0420 20	20 x D	4.20	21.0	67	74	34	110	5	◦
W05 0420 25	25 x D			67	74	34	110	5	◦
W05 0420 30	30 x D			67	74	34	110	5	◦
W05 0430 12	12 x D			67	74	34	110	5	◦
W05 0430 15	15 x D	4.30	21.5	67	74	34	110	5	◦
W05 0430 20	20 x D			67	74	34	110	5	◦
W05 0430 25	25 x D			67	74	34	110	5	◦
W05 0430 30	30 x D			67	74	34	110	5	◦
W05 0440 12	12 x D	4.40	22.0	67	74	34	110	5	◦
W05 0440 15	15 x D			67	74	34	110	5	◦
W05 0440 20	20 x D			67	74	34	110	5	◦
W05 0440 25	25 x D			67	74	34	110	5	◦
W05 0440 30	30 x D	4.50	22.5	67	74	34	110	5	◦
W05 0450 12	12 x D			67	74	34	110	5	◦
W05 0450 15	15 x D			67	74	34	110	5	◦
W05 0450 20	20 x D			67	74	34	110	5	◦
W05 0450 25	25 x D			67	74	34	110	5	◦
W05 0450 30	30 x D	4.60	23.0	67	74	34	110	5	◦
W05 0460 12	12 x D			67	74	34	110	5	◦
W05 0460 15	15 x D			67	74	34	110	5	◦
W05 0460 20	20 x D			67	74	34	110	5	◦
W05 0460 25	25 x D	4.70	23.5	67	74	34	110	5	◦
W05 0460 30	30 x D			67	74	34	110	5	◦
W05 0470 12	12 x D			67	74	34	110	5	◦
W05 0470 15	15 x D			67	74	34	110	5	◦
W05 0470 20	20 x D	4.80	24.0	67	74	34	110	5	◦
W05 0470 25	25 x D			67	74	34	110	5	◦
W05 0470 30	30 x D			67	74	34	110	5	◦
W05 0480 12	12 x D			67	74	34	110	5	◦
W05 0480 15	15 x D	4.90	24.5	67	74	34	110	5	◦
W05 0480 20	20 x D			67	74	34	110	5	◦
W05 0480 25	25 x D			67	74	34	110	5	◦
W05 0480 30	30 x D			67	74	34	110	5	◦
W05 0490 12	12 x D	5.00	25.0	67	74	34	110	5	◦
W05 0490 15	15 x D			67	74	34	110	5	◦
W05 0490 20	20 x D			67	74	34	110	5	◦
W05 0490 25	25 x D			67	74	34	110	5	◦
W05 0500 12	12 x D	5.10	25.5	67	74	34	110	5	◦
W05 0500 15	15 x D			67	74	34	110	5	◦
W05 0500 20	20 x D			67	74	34	110	5	◦
W05 0500 25	25 x D			67	74	34	110	5	◦
W05 0510 12	12 x D	5.20	26.0	67	74	34	110	5	◦
W05 0510 15	15 x D			67	74	34	110	5	◦
W05 0510 20	20 x D			67	74	34	110	5	◦
W05 0510 25	25 x D			67	74	34	110	5	◦
W05 0510 30	30 x D	5.30	26.5	67	74	34	110	5	◦
W05 0520 12	12 x D			67	74	34	110	5	◦
W05 0520 15	15 x D			67	74	34	110	5	◦
W05 0520 20	20 x D			67	74	34	110	5	◦
W05 0520 25	25 x D	5.40	27.0	67	74	34	110	5	◦
W05 0520 30	30 x D			67	74	34	110	5	◦
W05 0530 12	12 x D			67	74	34	110	5	◦
W05 0530 15	15 x D	5.50	27.5	67	74	34	110	5	◦
W05 0530 20	20 x D			67	74	34	110	5	◦
W05 0530 25	25 x D			67	74	34	110	5	◦
W05 0530 30	30 x D			67	74	34	110	5	◦
W05 0540 12	12 x D	5.60	28.0	67	74	34	110	5	◦
W05 0540 15	15 x D			67	74	34	110	5	◦
W05 0540 20	20 x D			67	74	34	110	5	◦
W05 0540 25	25 x D			67	74	34	110	5	◦
W05 0540 30	30 x D	5.70	28.5	67	74	34	110	5	◦
W05 0550 12	12 x D			67	74	34	110	5	◦
W05 0550 15	15 x D			67	74	34	110	5	◦
W05 0550 20	20 x D			67	74	34	110	5	◦
W05 0550 25	25 x D			67	74	34	110	5	◦
W05 0550 30	30 x D	5.80	29.0	67	74	34	110	5	◦
W05 0560 12	12 x D			67	74	34	110	5	◦
W05 0560 15	15 x D			67	74	34	110	5	◦
W05 0560 20	20 x D			67	74	34	110	5	◦
W05 0560 25	25 x D			67	74	34	110	5	◦
W05 0560 30	30 x D	5.90	29.5	67	74	34	110	5	◦
W05 0570 12	12 x D			67	74	34	110	5	◦
W05 0570 15	15 x D			67	74	34	110	5	◦
W05 0570 20	20 x D			67	74	34	110	5	◦
W05 0570 25	25 x D	6.00	30.0	67	74	34	110	5	◦
W05 0570 30	30 x D			67	74	34	110	5	◦
W05 0580 12	12 x D			67	74	34	110	5	◦
W05 0580 15	15 x D	6.10	30.5	67	74	34	110	5	◦
W05 0580 20	20 x D			67	74	34	110	5	◦
W05 0580 25	25 x D			67	74	34	110	5	◦
W05 0580 30	30 x D			67	74	34	110	5	◦
W05 0590 12	12 x D	6.20	31.0	67	74	34	110	5	◦
W05 0590 15	15 x D			67	74	34	110	5	◦
W05 0590 20	20 x D			67	74	34	110	5	◦
W05 0590 25	25 x D			67	74	34	110	5	◦
W05 0590 30	30 x D								

DR-LX SB OIL FEED TWIST DRILLS - 135° POINT ANGLE -12 X Ø, 15X Ø, 20X Ø, 25X Ø, 30X Ø

 VHM DR-LX SB Kühlkanalbohrer nach 135° Spitzenwinkel, Schaft nach DIN 6535HA 12 x Ø, 15x Ø, 20x Ø, 25x Ø, 30x Ø

 **Punte elicoidali DR-LX SB, con foro di lubrificazione, angolo di punta 135°, codolo DIN 6535HA- 12 x Ø. 15x Ø. 20x Ø. 25x Ø. 30x Ø**

 **Forêts hélicoïdaux DR-LX SB à trous d'huile angle de pointe 135°, queue selon DIN 6535HA - 12 x Ø. 15x Ø. 20x Ø. 25x Ø. 30x Ø**

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

[illegible]

* - DIN 6535

Remark: I2 is just a guideline for maximum drilling depth, make adjustments accordingly to your machine or workpiece conditions and do not exceed the maximum values. Please find technical info (application) , page 517.

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

Cutting Parameter

487 - 490

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



DR-LX Oil Feed Twist Drills - Point Angle 135°, 12 × D - W05

Working Material	N					
	Wrought Aluminium		Cast Aluminium		Copper Alloy	
Properties	Si < 9%		Si ≥ 9%		-	
D	Vc	fn	Vc	fn	Vc	fn
3.0	120 - 170	0.084	105 - 150	0.083	90 - 140	0.081
4.0		0.120		0.119		0.116
5.0		0.161		0.160		0.155
6.0		0.209		0.203		0.196
7.0		0.259		0.253		0.245
8.0		0.311		0.305		0.298
9.0		0.332		0.323		0.321
10.0		0.351		0.350		0.340
12.0		0.381		0.371		0.365

DR-LX Oil Feed Twist Drills - Point Angle 135°, 12 × D - W05

Working Material	P					
	Carbon Steel		Alloy Steel		Prehardened Steel	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45	
D	Vc	fn	Vc	fn	Vc	fn
3.0	80 - 120	0.066	65 - 110	0.064	55 - 80	0.063
4.0		0.095		0.092		0.088
5.0		0.126		0.123		0.120
6.0		0.164		0.153		0.153
7.0		0.202		0.189		0.192
8.0		0.245		0.232		0.231
9.0		0.272		0.246		0.249
10.0		0.294		0.263		0.266
12.0		0.339		0.287		0.280

DR-LX Oil Feed Twist Drills - Point Angle 135°, 12 × D - W05

Working Material	K				M			
	Grey Cast Iron		Ductile Cast Iron		Stainless Steel		Stainless Steel	
Properties	-		-		High Machinability		Low Machinability	
D	Vc	fn	Vc	fn	Vc	fn	Vc	fn
3.0	70 - 110	0.067	55 - 80	0.067	50 - 75	0.066	35 - 50	0.062
4.0		0.097		0.094		0.094		0.088
5.0		0.130		0.126		0.122		0.113
6.0		0.164		0.160		0.158		0.147
7.0		0.209		0.200		0.190		0.176
8.0		0.251		0.242		0.234		0.218
9.0		0.262		0.262		0.248		0.224
10.0		0.280		0.273		0.259		0.248
12.0		0.304		0.288		0.298		0.267

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



DR-LX Oil Feed Twist Drills - Point Angle 135°, 12 × D - W05

Working Material	S			
	Titanium alloy		Nickel Alloy	
Properties	-		-	
D	Vc	fn	Vc	fn
3.0	25 - 35	0.062	20 - 30	0.052
4.0		0.088		0.077
5.0		0.112		0.097
6.0		0.158		0.120
7.0		0.190		0.140
8.0		0.234		0.182
9.0		0.242		0.202
10.0		0.252		0.210
12.0		0.280		0.220

DR-LX Oil Feed Twist Drills - Point Angle 135°, 15 × D, 20 × D - W05

Working Material	N					
	Wrought Aluminium		Cast Aluminium		Copper Alloy	
Properties	Si < 9%		Si ≥ 9%		-	
D	Vc	fn	Vc	fn	Vc	fn
3.0	115 - 160	0.102	100 - 140	0.098	85 - 130	0.095
4.0		0.132		0.126		0.123
5.0		0.193		0.186		0.181
6.0		0.227		0.218		0.210
7.0		0.255		0.248		0.248
8.0		0.311		0.304		0.300
9.0		0.340		0.325		0.316
10.0		0.398		0.381		0.370
12.0		0.454		0.437		0.421

DR-LX Oil Feed Twist Drills - Point Angle 135°, 15 × D, 20 × D - W05

Working Material	P					
	Carbon Steel		Alloy Steel		Prehardened Steel	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45	
D	Vc	fn	Vc	fn	Vc	fn
3.0	75 - 110	0.077	60 - 100	0.076	50 - 70	0.076
4.0		0.101		0.098		0.098
5.0		0.148		0.144		0.144
6.0		0.171		0.168		0.168
7.0		0.193		0.192		0.193
8.0		0.239		0.237		0.242
9.0		0.248		0.256		0.252
10.0		0.295		0.297		0.294
12.0		0.342		0.336		0.336

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



DR-LX Oil Feed Twist Drills - Point Angle 135°, 15 × D, 20 × D - W05

Working Material	K				M			
	Grey Cast Iron		Ductile Cast Iron		Stainless Steel		Stainless Steel	
Properties	-		-		High Machinability		Low Machinability	
D	Vc	fn	Vc	fn	Vc	fn	Vc	fn
3.0	65 - 100	0.081	50 - 70	0.081	45 - 65	0.073	30 - 45	0.060
4.0		0.105		0.105		0.095		0.078
5.0		0.154		0.154		0.140		0.115
6.0		0.179		0.179		0.161		0.133
7.0		0.204		0.204		0.189		0.147
8.0		0.249		0.255		0.231		0.183
9.0		0.260		0.266		0.249		0.186
10.0		0.309		0.309		0.286		0.227
12.0		0.358		0.358		0.322		0.266

DR-LX Oil Feed Twist Drills - Point Angle 135°, 15 × D, 20 × D - W05

Working Material	S			
	Titanium alloy		Nickel Alloy	
Properties	-		-	
D	Vc	fn	Vc	fn
3.0	20 - 30	0.078	15 - 25	0.049
4.0		0.102		0.063
5.0		0.150		0.091
6.0		0.174		0.109
7.0		0.190		0.116
8.0		0.234		0.154
9.0		0.242		0.171
10.0		0.294		0.196
12.0		0.347		0.218

DR-LX Oil Feed Twist Drills - Point Angle 135°, 25 × D, 30 × D - W05

Working Material	N					
	Wrought Aluminium		Cast Aluminium		Copper Alloy	
Properties	Si < 9%		Si ≥ 9%		-	
D	Vc	fn	Vc	fn	Vc	fn
3.0	100 - 130	0.110	85 - 115	0.107	70 - 100	0.104
4.0		0.150		0.146		0.143
5.0		0.209		0.205		0.199
6.0		0.259		0.251		0.242
7.0		0.309		0.301		0.295
8.0		0.373		0.366		0.359
9.0		0.402		0.389		0.383
10.0		0.445		0.435		0.423
12.0		0.493		0.478		0.466

Recommended Cutting Data



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



DR-LX Oil Feed Twist Drills - Point Angle 135°, 25 × D, 30 × D - W05

Working Material	P					
	Carbon Steel		Alloy Steel		Prehardened Steel	
Properties	-		520 < Rm < 1200		35 ≤ HRC < 45	
D	Vc	fn	Vc	fn	Vc	fn
3.0	60 - 85	0.085	45 - 70	0.083	35 - 45	0.082
4.0		0.117		0.114		0.111
5.0		0.162		0.158		0.156
6.0		0.200		0.191		0.191
7.0		0.238		0.228		0.231
8.0		0.291		0.281		0.283
9.0		0.314		0.301		0.300
10.0		0.354		0.333		0.333
12.0		0.408		0.369		0.364

DR-LX Oil Feed Twist Drills - Point Angle 135°, 25 × D, 30 × D - W05

Working Material	K				M			
	Grey Cast Iron		Ductile Cast Iron		Stainless Steel		Stainless Steel	
Properties	-		-		High Machinability		Low Machinability	
D	Vc	fn	Vc	fn	Vc	fn	Vc	fn
3.0	50 - 75	0.088	35 - 45	0.088	30 - 40	0.082	20 - 30	0.073
4.0		0.120		0.118		0.113		0.101
5.0		0.168		0.165		0.155		0.137
6.0		0.204		0.201		0.191		0.169
7.0		0.248		0.242		0.228		0.197
8.0		0.300		0.297		0.279		0.245
9.0		0.313		0.316		0.298		0.250
10.0		0.351		0.346		0.324		0.287
12.0		0.392		0.381		0.370		0.320

DR-LX Oil Feed Twist Drills - Point Angle 135°, 25 × D, 30 × D - W05

Working Material	S			
	Titanium alloy		Nickel Alloy	
Properties	-		-	
D	Vc	fn	Vc	fn
3.0	15 - 25	0.082	15 - 20	0.061
4.0		0.113		0.085
5.0		0.153		0.113
6.0		0.198		0.139
7.0		0.228		0.156
8.0		0.281		0.204
9.0		0.291		0.227
10.0		0.323		0.245
12.0		0.370		0.263

NC SPOT
DR ALU
EZ LINE -
DRILL
DR NITCo
DR VA
DR-S
DR MINI
DR-LX
DR 45 SB
DR 60