

S

SX DRILL

Hochleistungsbohrer für Nickellegierungen



Konvexe Schneide
für weiches
Schneiden und starke
Schneidecken



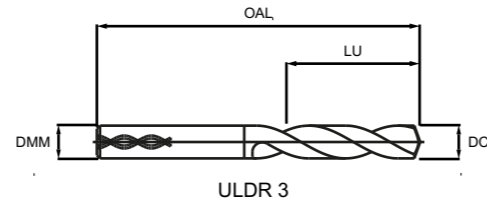
- **Neu im Premier Line Bohrprogramm**
- **Spezielle Spitzengeometrie für hitzebeständige Nickelbasis Werkstoffe**
- **verstärkte Schneidecken für hohe Prozesssicherheit**
- **polierte Spannuten für optimale Spanabfuhr**
- **spezielle Nano Beschichtung für erhöhte Standzeit**

3XD



Series No. 869329

Special flute shape optimised for chip evacuation in Nickel alloys
 Convex cutting edge geometry for reduced cutting load and increase strength
 Tailored surface treatment after coating highly suited to machining HRSA materials.



EUROPA CODE ORDCODE	OD DC	SD DMM	FL.LTH LU	O/ALL OAL	EUROPA CODE ORDCODE	OD DC	SD DMM	FL.LTH LU	O/ALL OAL
8693290300	3.0	6.0	20	62	8693290610	6.1	8.0	34	79
8693290310	3.1	6.0	20	62	8693290620	6.2	8.0	34	79
8693290320	3.2	6.0	20	62	8693290630	6.3	8.0	34	79
8693290330	3.3	6.0	20	62	8693290640	6.4	8.0	34	79
8693290340	3.4	6.0	20	62	8693290650	6.5	8.0	34	79
8693290350	3.5	6.0	20	62	8693290660	6.6	8.0	34	79
8693290360	3.6	6.0	20	62	8693290670	6.7	8.0	34	79
8693290370	3.7	6.0	20	62	8693290680	6.8	8.0	34	79
8693290380	3.8	6.0	24	66	8693290690	6.9	8.0	34	79
8693290390	3.9	6.0	24	66	8693290700	7.0	8.0	34	79
8693290400	4.0	6.0	24	66	8693290710	7.1	8.0	41	79
8693290410	4.1	6.0	24	66	8693290720	7.2	8.0	41	79
8693290420	4.2	6.0	24	66	8693290730	7.3	8.0	41	79
8693290430	4.3	6.0	24	66	8693290740	7.4	8.0	41	79
8693290440	4.4	6.0	24	66	8693290750	7.5	8.0	41	79
8693290450	4.5	6.0	24	66	8693290760	7.6	8.0	41	79
8693290460	4.6	6.0	24	66	8693290770	7.7	8.0	41	79
8693290470	4.7	6.0	24	66	8693290780	7.8	8.0	41	79
8693290480	4.8	6.0	28	66	8693290790	7.9	8.0	41	79
8693290490	4.9	6.0	28	66	8693290800	8.0	8.0	41	79
8693290500	5.0	6.0	28	66	8693290810	8.1	10.0	47	89
8693290510	5.1	6.0	28	66	8693290820	8.2	10.0	47	89
8693290520	5.2	6.0	28	66	8693290830	8.3	10.0	47	89
8693290530	5.3	6.0	28	66	8693290840	8.4	10.0	47	89
8693290540	5.4	6.0	28	66	8693290850	8.5	10.0	47	89
8693290550	5.5	6.0	28	66	8693290860	8.6	10.0	47	89
8693290560	5.6	6.0	28	66	8693290870	8.7	10.0	47	89
8693290570	5.7	6.0	28	66	8693290880	8.8	10.0	47	89
8693290580	5.8	6.0	28	66	8693290890	8.9	10.0	47	89
8693290590	5.9	6.0	28	66	8693290900	9.0	10.0	47	89
8693290600	6.0	6.0	28	66	8693290910	9.1	10.0	47	89

Drill Dia. Tolerance TCDC	Shank Dia. Tolerance TCDMM
m7	h6

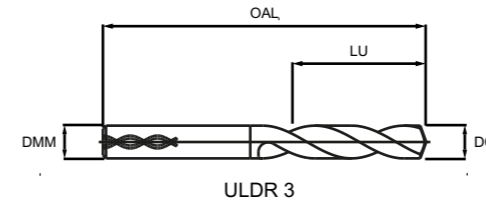
ISO	P		M		K		N					S		H		
VDI GROUP	1-5	6-9	10-11	12, 13	14	15-16	17-20	21-25	26-28	29.1	29.2	30	31-35	36-37	38-39	40-41
● ○													● ○			
Primary Secondary													● ○			

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8693290920	9.2	10.0	47	89	8693291200	12.0	12.0	55	102
8693290930	9.3	10.0	47	89	8693291210	12.1	14.0	60	107
8693290940	9.4	10.0	47	89	8693291220	12.2	14.0	60	107
8693290950	9.5	10.0	47	89	8693291230	12.3	14.0	60	107
8693290960	9.6	10.0	47	89	8693291250	12.5	14.0	60	107
8693290970	9.7	10.0	47	89	8693291260	12.6	14.0	60	107
8693290980	9.8	10.0	47	89	8693291270	12.7	14.0	60	107
8693290990	9.9	10.0	47	89	8693291280	12.8	14.0	60	107
8693291000	10.0	10.0	47	89	8693291290	12.9	14.0	60	107
8693291010	10.1	12.0	55	102	8693291300	13.0	14.0	60	107
8693291020	10.2	12.0	55	102	8693291310	13.1	14.0	60	107
8693291030	10.3	12.0	55	102	8693291320	13.2	14.0	60	107
8693291040	10.4	12.0	55	102	8693291350	13.5	14.0	60	107
8693291050	10.5	12.0	55	102	8693291360	13.6	14.0	60	107
8693291060	10.6	12.0	55	102	8693291380	13.8	14.0	60	107
8693291070	10.7	12.0	55	102	8693291390	13.9	14.0	60	107
8693291080	10.8	12.0	55	102	8693291400	14.0	14.0	60	107
8693291090	10.9	12.0	55	102	8693291410	14.1	16.0	65	115
8693291100	11.0	12.0	55	102	8693291420	14.2	16.0	65	115
8693291110	11.1	12.0	55	102	8693291430	14.3	16.0	65	115
8693291120	11.2	12.0	55	102	8693291450	14.5	16.0	65	115
8693291130	11.3	12.0	55	102	8693291460	14.6	16.0	65	115
8693291140	11.4	12.0	55	102	8693291500	15.0	16.0	65	115
8693291150	11.5	12.0	55	102	8693291520	15.2	16.0	65	115
8693291160	11.6	12.0	55	102	8693291550	15.5	16.0	65	115
8693291170	11.7	12.0	55	102	8693291580	15.8	16.0	65	115
8693291180	11.8	12.0	55	102	8693291600	16.0	16.0	65	115
8693291190	11.9	12.0	55	102	8693292000	20.0	20.0	79	131

Drill Dia. Tolerance TCDC	Shank Dia. Tolerance TCDMM
m7	h6

ISO	P		M		K		N					S		H		
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● ○													● ○			
Primary Secondary													● ○			

CUTTING DATA

869329, 870329 SX DRILL														
VDI MATERIAL GROUP	HRc	Vc (m/min)	f _n (mm/rev)											
			ø3.0 -3.9	ø4.0 -4.9	ø5.0 -5.9	ø6.0 -6.9	ø7.0 -7.9	ø8.0 -9.9	ø10.0 -11.9	ø12.0 -13.9	ø14.0 -15.9	ø16.0	ø20.0	
S	31-35 HRSA Fe & Ni/Co Based		25 (22-28)	0.05	0.07	0.09	0.11	0.13	0.15	0.18	0.22	0.25	0.29	0.36
	36-37 Titanium & Titanium Alloys		40 (35-45)	0.03	0.04	0.05	0.06	0.06	0.08	0.08	0.10	0.12	0.14	0.18

► For recommended coolant pressure refer to main catalogue

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SX DRILL

Konvexe Schneidlippe -
Ermöglicht ein weiches
Schneiden in schwer zu
bearbeitenden
hitzebeständigen
Materialien

Polierte Spankammer - für
optimale Spanabfuhr

Spezialbeschichtung -
Nanobeschichtung für
eine lange Standzeit

Verstärkte Eckengeometrie
für hohe Prozesssicherheit
bei Nickelbasislegierungen

Test Condition
Tool: 8693290720 7.2mm 3xD
Method: Through hole - no pecking
Material: Forged Inconel 718 (45HRc)
Vc: 24 m/min
n: 1062 rev/min
f: 96 mm/min
f _n : 0.09 mm/rev
L.o.C: 7.7mm
Coolant: 10% Emulsion
Machine: Vertical Machining Centre

Result	
No. of holes	900
800	700
600	500
400	300
200	100
0	0
SX DRILL	COMPETITOR
827	404
Wear	Broken

SX drill fully complied to tight specifications regarding hole size and position, perpendicularity and burr formation