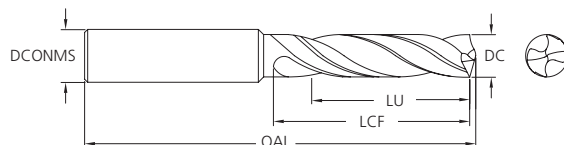
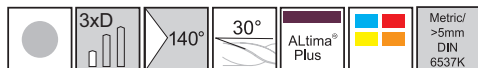


CYCLONE CXD 3xD - Series CXDSS

Designed for high performance drilling in a broad range of materials.



- Double Margin.
- Usable length (LU) = LCF - (1.5 x DC).

ALtima® Plus		DC (m7)				DCONMS (h6)		OAL		LCF	
Tool No.	EDP	Inch	Letter/ Wire	mm	Decimal	Inch	mm	Inch	mm	Inch	mm
CXDSS 0300AP	06615			3.0	.1181		3.0		62		20
CXDSS1200AP	06616		#31		.1200	1/8		2.44		0.787	
CXDSS 0310AP	06617			3.1	.1220		4.0		62		20
CXDSS1250AP	06618	1/8			.1250	1/8		2.44		0.787	
CXDSS 0320AP	06619			3.2	.1260		4.0		62		20
CXDSS1285AP	06620		#30		.1285	5/32		2.44		0.787	
CXDSS 0330AP	06621			3.3	.1299		4.0		62		20
CXDSS 0340AP	06622			3.4	.1339		4.0		62		20
CXDSS1360AP	06623		#29		.1360	5/32		2.44		0.787	
CXDSS 0350AP	06624			3.5	.1378		4.0		62		20
CXDSS1406AP	06625	9/64			.1406	5/32		2.44		0.787	
CXDSS 0360AP	06626			3.6	.1417		4.0		62		20
CXDSS 0370AP	06627			3.7	.1457		4.0		62		20
CXDSS 0380AP	06628			3.8	.1496		4.0		66		24
CXDSS1520AP	06629		#24		.1520	5/32		2.60		0.945	
CXDSS 0390AP	06630			3.9	.1535		4.0		66		24
CXDSS1562AP	06631	5/32			.1562	5/32		2.60		0.945	
CXDSS 0400AP	06632			4.0	.1575		4.0		66		24
CXDSS1590AP	06633		#21		.1590	3/16		2.60		0.945	
CXDSS 0410AP	06634			4.1	.1614		5.0		66		24
CXDSS 0420AP	06635			4.2	.1654		5.0		66		24
CXDSS 0430AP	06636			4.3	.1693		5.0		66		24
CXDSS1719AP	06637	11/64			.1719	3/16		2.60		0.945	
CXDSS 0440AP	06638			4.4	.1732		5.0		66		24
CXDSS 0450AP	06639			4.5	.1772		5.0		66		24
CXDSS 0460AP	06640			4.6	.1811		5.0		66		24
CXDSS 0470AP	06641			4.7	.1850		5.0		66		24
CXDSS1875AP	06642	3/16			.1875	3/16		2.60		1.102	
CXDSS 0480AP	06643			4.8	.1890		5.0		66		28
CXDSS 0490AP	06644			4.9	.1929		5.0		66		28
CXDSS 0500AP	06645			5.0	.1968		5.0		66		28

Inch	
DC	Tolerance (m7)
.0000 - .1181	+0.0008/+0.0047
.1182 - .2362	+0.0016/+0.0063
.2363 - .3937	+0.0024/+0.0083
.3938 - .7087	+0.0027/+0.0098
.7088 - .7500	+0.0031/+0.0114

Inch	
DCONMS	Tolerance (h6)
.0000 - .1181	+0/-0.0024
.1182 - .2362	+0/-0.0031
.2363 - .3937	+0/-0.0035
.3938 - .7087	+0/-0.0043
.7088 - .7500	+0/-0.0051

Metric (mm)	
DC	Tolerance (m7)
0 - 3.0	+0.02/+0.12
3.01 - 6.0	+0.04/+0.16
6.01 - 10.0	+0.06/+0.21
10.01 - 18.0	+0.07/+0.25
18.01 - 20.0	+0.08/+0.29

Metric (mm)	
DCONMS	Tolerance (h6)
0 - 3.0	+0/-0.006
3.01 - 6.0	+0/-0.008
6.01 - 10.0	+0/-0.009
10.01 - 18.0	+0/-0.011
18.01 - 20.0	+0/-0.013

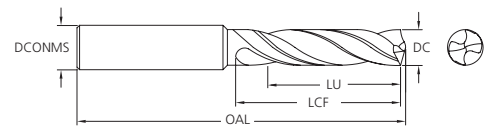
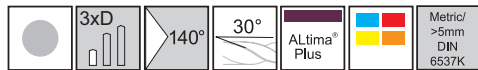


Page 350

ALtima® Plus		DC (m7)				DCONMS (h6)		OAL		LCF	
Tool No.	EDP	Inch	Letter/ Wire	mm	Decimal	Inch	mm	Inch	mm	Inch	mm
CXDSS 0510AP	06646			5.1	.2008		6.0		66		28
CXDSS2031AP	06647	13/64			.2031	1/4		2.60		1.102	
CXDSS 0520AP	06648			5.2	.2047		6.0		66		28
CXDSS 0530AP	06649			5.3	.2087		6.0		66		28
CXDSS 0540AP	06650			5.4	.2126		6.0		66		28
CXDSS 0550AP	06651			5.5	.2165		6.0		66		28
CXDSS2187AP	06652	7/32			.2187	1/4		2.60		1.102	
CXDSS 0560AP	07091			5.6	.2205		6.0		66		28
CXDSS2210AP	06653		#2		.2210	1/4		2.60		1.102	
CXDSS 0570AP	06654			5.7	.2244		6.0		66		28
CXDSS 0580AP	06655			5.8	.2283		6.0		66		28
CXDSS 0590AP	06656			5.9	.2323		6.0		66		28
CXDSS2344AP	06657	15/64			.2344	1/4		2.60		1.102	
CXDSS 0600AP	06658			6.0	.2362		6.0		66		28
CXDSS 0610AP	06659			6.1	.2402		8.0		79		34
CXDSS2420AP	06660		C		.2420	1/4		3.11		1.339	
CXDSS 0620AP	06661			6.2	.2441		8.0		79		34
CXDSS2460AP	06662		D		.2460	1/4		3.11		1.339	
CXDSS 0630AP	06663			6.3	.2480		8.0		79		34
CXDSS2500AP	06664	1/4			.2500	1/4		3.11		1.339	
CXDSS 0640AP	06665			6.4	.2520		8.0		79		34
CXDSS 0650AP	06666			6.5	.2559		8.0		79		34
CXDSS2570AP	06667		F		.2570	5/16		3.11		1.339	
CXDSS 0660AP	06668			6.6	.2598		8.0		79		34
CXDSS2610AP	06669		G		.2610	5/16		3.11		1.339	
CXDSS 0670AP	06670			6.7	.2638		8.0		79		34
CXDSS2656AP	06671	17/64			.2656	5/16		3.11		1.339	
CXDSS 0680AP	06672			6.8	.2677		8.0		79		34
CXDSS 0690AP	06673			6.9	.2717		8.0		79		34
CXDSS 0700AP	06674			7.0	.2756		8.0		79		34
CXDSS 0710AP	06675			7.1	.2795		8.0		79		41
CXDSS2812AP	06676	9/32			.2812	5/16		3.11		1.614	
CXDSS 0720AP	06677			7.2	.2835		8.0		79		41
CXDSS 0730AP	06678			7.3	.2874		8.0		79		41
CXDSS 0740AP	06679			7.4	.2913		8.0		79		41
CXDSS 0750AP	06680			7.5	.2953		8.0		79		41
CXDSS2969AP	06681	19/64			.2969	5/16		3.11		1.614	
CXDSS 0760AP	06682			7.6	.2992		8.0		79		41
CXDSS 0770AP	06683			7.7	.3031		8.0		79		41
CXDSS 0780AP	06684			7.8	.3071		8.0		79		41
CXDSS 0790AP	06685			7.9	.3110		8.0		79		41
CXDSS3125AP	06686	5/16			.3125	5/16		3.11		1.614	
CXDSS 0800AP	06687			8.0	.3150		8.0		79		41



CYCLONE CXD 3xD - Series CXDSS *Continued*



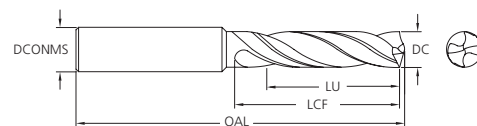
ALtima® Plus		DC (m7)				DCONMS (h6)		OAL		LCF	
Tool No.	EDP	Inch	Letter/ Wire	mm	Decimal	Inch	mm	Inch	mm	Inch	mm
CXDSS 0810AP	06688			8.1	.3189		10.0		89		47
CXDSS 0820AP	06689			8.2	.3228		10.0		89		47
CXDSS 0830AP	06690			8.3	.3268		10.0		89		47
CXDSS3281AP	06691	21/64			.3281	3/8		3.50		1.850	
CXDSS 0840AP	06692			8.4	.3307		10.0		89		47
CXDSS3320AP	06693		Q		.3320	3/8		3.50		1.850	
CXDSS 0850AP	06694			8.5	.3346		10.0		89		47
CXDSS 0860AP	06695			8.6	.3386		10.0		89		47
CXDSS 0870AP	06696			8.7	.3425		10.0		89		47
CXDSS3438AP	06697	11/32			.3438	3/8		3.50		1.850	
CXDSS 0880AP	06698			8.8	.3465		10.0		89		47
CXDSS 0890AP	06699			8.9	.3504		10.0		89		47
CXDSS 0900AP	06700			9.0	.3543		10.0		89		47
CXDSS 0910AP	06701			9.1	.3583		10.0		89		47
CXDSS3594AP	06702	23/64			.3594	3/8		3.50		1.850	
CXDSS 0920AP	06703			9.2	.3622		10.0		89		47
CXDSS 0925AP	06704			9.25	.3642		10.0		89		47
CXDSS 0930AP	06705			9.3	.3661		10.0		89		47
CXDSS 0940AP	06706			9.4	.3701		10.0		89		47
CXDSS 0950AP	06707			9.5	.3740		10.0		89		47
CXDSS3750AP	06708	3/8			.3750	3/8		3.50		1.850	
CXDSS 0960AP	06709			9.6	.3780		10.0		89		47
CXDSS 0970AP	06710			9.7	.3819		10.0		89		47
CXDSS 0980AP	06711			9.8	.3858		10.0		89		47
CXDSS 0990AP	06712			9.9	.3898		10.0		89		47
CXDSS3906AP	06713	25/64			.3906	7/16		3.50		1.850	
CXDSS 1000AP	06714			10.0	.3937		10.0		89		47
CXDSS 1010AP	06715			10.1	.3976		12.0		102		55
CXDSS 1020AP	06716			10.2	.4016		12.0		102		55
CXDSS 1030AP	06717			10.3	.4055		12.0		102		55
CXDSS4062AP	06718	13/32			.4062	7/16		4.02		2.165	
CXDSS 1040AP	06719			10.4	.4094		12.0		102		55
CXDSS 1050AP	06720			10.5	.4134		12.0		102		55
CXDSS 1060AP	06721			10.6	.4173		12.0		102		55
CXDSS 1070AP	06722			10.7	.4213		12.0		102		55



ALtima® Plus		DC (m7)				DCONMS (h6)		OAL		LCF	
Tool No.	EDP	Inch	Letter/ Wire	mm	Decimal	Inch	mm	Inch	mm	Inch	mm
CXDSS4219AP	06723	27/64			.4219	7/16		4.02		2.165	
CXDSS 1080AP	06724			10.8	.4252		12.0		102		55
CXDSS 1090AP	06725			10.9	.4291		12.0		102		55
CXDSS 1100AP	06726			11.0	.4331		12.0		102		55
CXDSS 1110AP	06727			11.1	.4370		12.0		102		55
CXDSS4375AP	06728	7/16			.4375	7/16		4.02		2.165	
CXDSS 1120AP	06729			11.2	.4409		12.0		102		55
CXDSS 1130AP	06730			11.3	.4449		12.0		102		55
CXDSS 1140AP	06731			11.4	.4488		12.0		102		55
CXDSS 1150AP	06732			11.5	.4527		12.0		102		55
CXDSS 1160AP	06733			11.6	.4567		12.0		102		55
CXDSS 1170AP	06734			11.7	.4606		12.0		102		55
CXDSS 1180AP	06735			11.8	.4646		12.0		102		55
CXDSS 1190AP	06736			11.9	.4685		12.0		102		55
CXDSS4688AP	06737	15/32			.4688	1/2		4.02		2.165	
CXDSS 1200AP	06738			12.0	.4724		12.0		102		55
CXDSS 1210AP	06739			12.1	.4764		14.0		107		60
CXDSS4844AP	06740	31/64			.4844	1/2		4.21		2.362	
CXDSS 1250AP	06741			12.5	.4921		14.0		107		60
CXDSS5000AP	06742	1/2			.5000	1/2		4.21		2.362	
CXDSS 1280AP	06743			12.8	.5039		14.0		107		60
CXDSS 1283AP	06744			12.83	.5051		14.0		107		60
CXDSS 1290AP	06745			12.9	.5079		14.0		107		60
CXDSS 1300AP	06746			13.0	.5118		14.0		107		60
CXDSS5156AP	06747	33/64			.5156	9/16		4.21		2.362	
CXDSS5312AP	06748	17/32			.5312	9/16		4.21		2.362	
CXDSS 1350AP	06750			13.5	.5315		14.0		107		60
CXDSS 1370AP	06751			13.7	.5394		14.0		107		60
CXDSS5469AP	06752	35/64			.5469	9/16		4.21		2.362	
CXDSS 1400AP	06753			14.0	.5512		14.0		107		60
CXDSS5625AP	06754	9/16			.5625	9/16		4.53		2.559	
CXDSS 1450AP	06755			14.5	.5709		16.0		115		65
CXDSS 1470AP	06756			14.7	.5787		16.0		115		65
CXDSS 1500AP	06757			15.0	.5905		16.0		115		65
CXDSS5938AP	06758	19/32			.5938	5/8		4.53		2.559	
CXDSS 1530AP	06759			15.3	.6024		16.0		115		65
CXDSS 1550AP	06760			15.5	.6102		16.0		115		65
CXDSS 1570AP	06761			15.7	.6181		16.0		115		65
CXDSS6250AP	06762	5/8			.6250	5/8		4.53		2.559	
CXDSS 1600AP	06763			16.0	.6299		16.0		115		65
CXDSS 1608AP	06764			16.08	.6331		18.0		123		73
CXDSS 1630AP	06765			16.3	.6417		18.0		123		73



CYCLONE CXD 3xD - Series CXDSS *Continued*



ALtima® Plus		DC (m7)				DCONMS (h6)		OAL		LCF	
Tool No.	EDP	Inch	Letter/ Wire	mm	Decimal	Inch	mm	Inch	mm	Inch	mm
CXDSS 1650AP	06766			16.5	.6496		18.0		123		73
CXDSS6562AP	06767	21/32			.6562	11/16		4.84		2.874	
CXDSS 1700AP	06768			17.0	.6693		18.0		123		73
CXDSS6875AP	06769	11/16			.6875	11/16		4.84		2.874	
CXDSS 1750AP	06770			17.5	.6890		18.0		123		73
CXDSS 1800AP	06771			18.0	.7087		18.0		123		73
CXDSS 1850AP	06772			18.5	.7283		20.0		131		79
CXDSS7500AP	06773	3/4			.7500	3/4		5.16		3.11	
CXDSS 1916AP	06774			19.16	.7543		20.0		131		79
CXDSS 1925AP	06775			19.25	.7579		20.0		131		79
CXDSS 1930AP	06776			19.3	.7598		20.0		131		79
CXDSS 1950AP	06777			19.5	.7677		20.0		131		79
CXDSS 2000AP	06778			20.0	.7874		20.0		131		79



Page 350

ALtima® Plus

Advanced High Performance Coating

Coating Properties

MA Ford® Coating	MA Ford® Tool Number Designation	Microhardness (HV)	Maximum Service Temp.	Friction Coefficient
ALtima® Plus	AP	3200	1100° C / 2012° F	0.25

Safety Note

Always wear the appropriate personal protective equipment such as safety glasses and protective clothing when using solid carbide or HSS cutting tools. Machines should be fully guarded. Technical data provided should be considered advisory only as variations may be necessary depending on the particular application.