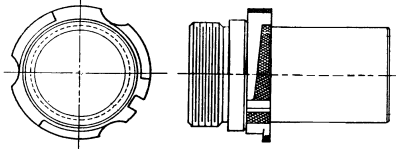


United s E-X-T-E-N-D-E-D Range Helical Nurlock

Note: LENGTHS 1/2" to 6" (6-1/4" to 15" on pgs P14-P15) A-26000 SERIES

A-27000 SERIES

EXTENDED RANGE ACCEPTS DRILLS AS LARGE AS 3-9/16, WITH INSIDE SHANKS AS LONG AS 15"

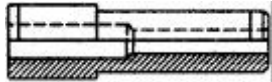


TOLERANCES ON 'A' DIMENSION

1/2 to 3/4	+ .0001 to .0006	1-3/8 to 1-3/4	+ .0006 to .0010
3/4 to 1-1/4	+ .0003 to .0009	1-3/4 to 2-1/4	+ .0008 to .0012
1-1/4 to 1-3/4	+ .0005 to .0009	2-1/4 to 3-9/16	+ .0010 to .0015

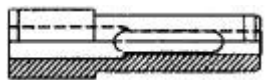
TOLERANCES ON 'B' DIMENSION

1-1/2 to 2"	+ .0002 to .0005	3" to 3-3/8	+ .0004 to .0008
8 to 2-3/8	+ .0003 to .0006	3-1/2 to 4"	+ .0005 to .0009



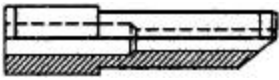
UDB-27531-7/16
OMIT 'A'

EXTENDED RANGE SHANK ONLY —FOR SHANK ONLY, OMIT PREFIX A. Example: UDB-27531



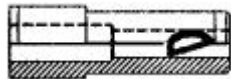
UDB-A-27531CS-7/16
ADD 'CS'

CHIP SLOT —SPECIFY A CHIP SLOT ON LONGER SHANKS, ADD SUFFIX CS. Ex: UDB-A-27531CS-7/16



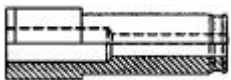
UDB-CTA-27531-7/16
PREFIX 'CT'

CONTOUR SURFACES —FOR CONTOUR SURFACES, USE OUR ANGULAR NOSE SHANK. ADD PREFIX CT. Example: UDB-CTA-27531-7/16



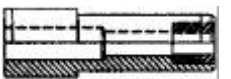
UDB-A-27531CC-7/16
ADD 'CC'

CHIP CUTTER —TO SPECIFY UNITED'S NEW PROPRIETARY CHIP CUTTER, ADD SUFFIX CC TO PART NO. Example: UDB-A-27531CC-7/16



UDB-A-27531EZ-7/16
ADD 'EZ'

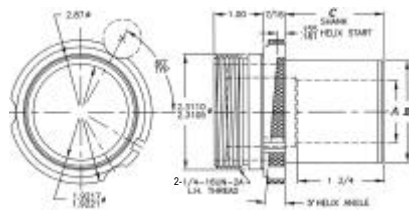
EASE IN RADIUS —TO SPECIFY UNITED'S NEW O.D. EASE IN RADIUS, ADD SUFFIX EZ TO PART NO. Example: UDB-A-27531EZ-7/16



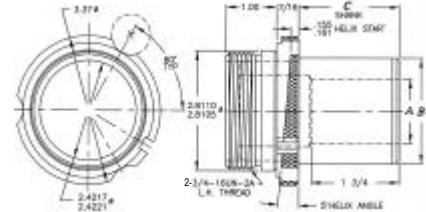
UDB-AU-27531-7/16
Insert 'U' for ULTRA III
UDB-AC-27531-7/16
Insert 'C' for CARBIDE

LONG WEARING INSERTS —TO ORDER LONG WEARING INSERTS FOR FIVE TIMES WEAR, SPECIFY PREFIX AU FOR ULTRA III MATERIAL. FOR TEN TIMES WEAR, SPECIFY PREFIX AC FOR CARBIDE.

2- - 6



2- - 6



(DRILL) A MAX	1-5/16 = 1.312	1-9/16 = 1.562	1-23/32 = 1.7187	1-13/16 = 1.812	2 = 2.00	2-1/16 = 2.062		
A MIN	3/8 = .375	3/8 = .75	3/8 = .375	7/16 = .437	7/16 = .437	7/16 = .437		
(SHANK OD) B	1-1/2 = 1.50	1-3/4 = 1.75	2 = 2.00	2 = 2.00	2-3/8 = 2.37	2-1/2 = 2.50		
C	1/2	0.50	A-26102	A-26302	A-26502	A-27102	A-27302	A-27502
L	5/8	0.62	A-26103	A-26303	A-26503	A-27103	A-27303	A-27503
E	3/4	0.75	A-26104	A-26304	A-26504	A-27104	A-27304	A-27504
N	7/8	0.87	A-26105	A-26305	A-26505	A-27105	A-27305	A-27505
G	1	1.00	A-26106	A-26306	A-26506	A-27106	A-27306	A-27506
T	1-1/16	1.06	A-26107	A-26307	A-26507	A-27107	A-27307	A-27507
H	1-1/8	1.12	A-26108	A-26308	A-26508	A-27108	A-27308	A-27508
E	1-3/16	1.18	A-26109	A-26309	A-26509	A-27109	A-27309	A-27509
X	1-1/4	1.25	A-26110	A-26310	A-26510	A-27110	A-27310	A-27510
T	1-3/8	1.37	A-26111	A-26311	A-26511	A-27111	A-27311	A-27511
N	1-7/16	1.44	A-26112	A-26312	A-26512	A-27112	A-27312	A-27512
E	1-1/2	1.50	A-26113	A-26313	A-26513	A-27113	A-27313	A-27513
D	1-5/8	1.62	A-26114	A-26314	A-26514	A-27114	A-27314	A-27514
S	1-3/4	1.75	A-26115	A-26315	A-26515	A-27115	A-27315	A-27515
N	1-7/8	1.87	A-26116	A-26316	A-26516	A-27116	A-27316	A-27516
S	1	1.94	A-26117	A-26317	A-26517	A-27117	A-27317	A-27517
F	2	2.00	A-26118	A-26318	A-26518	A-27118	A-27318	A-27518
R	2-1/8	2.12	A-26119	A-26319	A-26519	A-27119	A-27319	A-27519
O	2-1/4	2.25	A-26120	A-26320	A-26520	A-27120	A-27320	A-27520
M	2-3/8	2.37	A-26121	A-26321	A-26521	A-27121	A-27321	A-27521
C	2-1/2	2.50	A-26122	A-26322	A-26522	A-27122	A-27322	A-27522
O	2-5/8	2.62	A-26123	A-26323	A-26523	A-27123	A-27323	A-27523
L	2-3/4	2.75	A-26124	A-26324	A-26524	A-27124	A-27324	A-27524
A	3	3.00	A-26125	A-26325	A-26525	A-27125	A-27325	A-27525
R	3-1/4	3.25	A-26126	A-26326	A-26526	A-27126	A-27326	A-27526
I	3-1/2	3.50	A-26127	A-26327	A-26527	A-27127	A-27327	A-27527
N	3-3/4	3.75	A-26128	A-26328	A-26528	A-27128	A-27328	A-27528
C	4	4.00	A-26129	A-26329	A-26529	A-27129	A-27329	A-27529
H	4-1/4	4.25	A-26129-A	A-26329-A	A-26529-A	A-27129-A	A-27329-A	A-27529-A
E	4-1/2	4.50	A-26129-B	A-26329-B	A-26529-B	A-27129-B	A-27329-B	A-27529-B
S	4-3/4	4.75	A-26129-C	A-26329-C	A-26529-C	A-27129-C	A-27329-C	A-27529-C
C	5	5.00	A-26130	A-26330	A-26530	A-27130	A-27330	A-27530
H	5-1/4	5.25	A-26130-A	A-26330-A	A-26530-A	A-27130-A	A-27330-A	A-27530-A
E	5-1/2	5.50	A-26130-B	A-26330-B	A-26530-B	A-27130-B	A-27330-B	A-27530-B
S	5-3/4	5.75	A-26130-C	A-26330-C	A-26530-C	A-27130-C	A-27330-C	A-27530-C
	6	6.00	A-26131	A-26331	A-26531	A-27131	A-27331	A-27531

TO SELECT LARGER 6-1/4" TO 15" LENGTHS, SEE NEXT TWO PAGES.

LOCK LINERS In this section

HNL HNLP LL LLP
LOCK RING LOCK SCREW TLC CLAMP STRIP MOUNTING

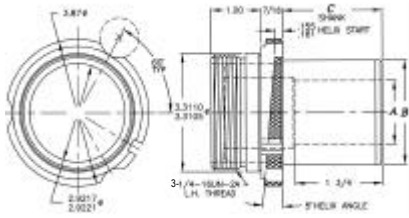
ACCESSORIES BELOW	COLLAR A-26000 2-1/4 - 16 LH ADD I.D. SIZE TO LINERS			COLLAR A-27000 2-3/4 - 16 LH ADD I.D. SIZE TO LINERS		
	1-1/2	1-3/4	2	2	2-3/8	2-1/2
HELICAL LOCK LINERS	UCC-HNL-26160	UCC-HNL-26360	UCC-HNL-26560	UCC-HNL-27160	UCC-HNL-27360	UCC-HNL-27560
LOCK RINGS	UCC-521458A	UCC-521458A	UCC-521458A	UCC-521470	UCC-521470	UCC-521470
HELICAL LOCK LINERS	UCC-HNLP-26160	UCC-HNLP-26360	UCC-HNLP-26560	UCC-HNLP-27160	UCC-HNLP-27360	UCC-HNLP-27560
LOCK LINERS	UCC-LL-26160	UCC-LL-26360	UCC-LL-26560	UCC-LL-27160	UCC-LL-27360	UCC-LL-27560
LOCK LINERS	UCC-LLP-26160	UCC-LLP-26360	UCC-LLP-26560	UCC-LLP-27160	UCC-LLP-27360	UCC-LLP-27560
LOCK SCREWS	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16
TAPER LOCK CLAMPS	TLC-3	TLC-3	TLC-3	TLC-6	TLC-6	TLC-6
STRIP MOUNTINGS	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX

FOR REDUCERS AND SIZE INCREASING BUSHINGS, PLEASE REFER TO THIS SECTION.

Bushing Tips, Lock Liners and Accessories

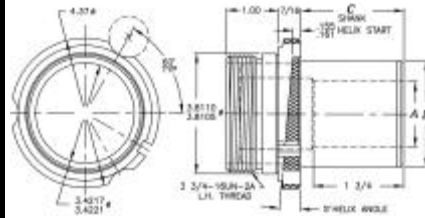
A-28000 SERIES

3-1/4 - 16 LH



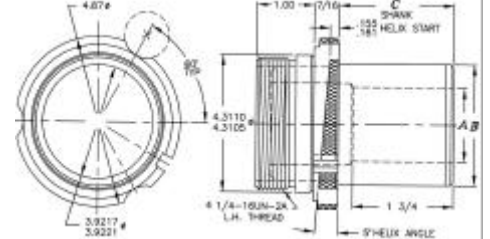
A-29000 SERIES

3-3/4 - 16 LH



A-30000 SERIES

4-1/4 - 16 LH



**LENGTHS
1/2" to 6"**

2-1/8 = 2.125	2-3/8 = 2.375	2-9/16 = 2.562	2-5/8 = 2.625	2-7/8 = 2.875	3-1/16 = 3.062	3-1/8 = 3.125	3-3/8 = 3.375	3-9/16 = 3.562	C =
1/2 = .500	1/2 = .500	1/2 = .500	9/16 = .562	9/16 = .562	9/16 = .562	5/8 = .625	5/8 = .625	5/8 = .625	SHANK
2-1/2 = 2.50	2-3/4 = 2.75	3 = 3.00	3 = 3.00	3-1/4 = 3.25	3-1/2 = 3.50	3-1/2 = 3.50	3-3/4 = 3.75	4 = 4.00	LEN
A-28102	A-28302	A-28502	A-29102	A-29302	A-29502	A-30102	A-30302	A-30502	1/2
A-28103	A-28303	A-28503	A-29103	A-29303	A-29503	A-30103	A-30303	A-30503	5/8
A-28104	A-28304	A-28504	A-29104	A-29304	A-29504	A-30104	A-30304	A-30504	3/4
A-28105	A-28305	A-28505	A-29105	A-29305	A-29505	A-30105	A-30305	A-30505	7/8
A-28106	A-28306	A-28506	A-29106	A-29306	A-29506	A-30106	A-30306	A-30506	1
A-28107	A-28307	A-28507	A-29107	A-29307	A-29507	A-30107	A-30307	A-30507	1-1/16
A-28108	A-28308	A-28508	A-29108	A-29308	A-29508	A-30108	A-30308	A-30508	1-1/8
A-28109	A-28309	A-28509	A-29109	A-29309	A-29509	A-30109	A-30309	A-30509	1-3/16
A-28110	A-28310	A-28510	A-29110	A-29310	A-29510	A-30110	A-30310	A-30510	1-1/4
A-28111	A-28311	A-28511	A-29111	A-29311	A-29511	A-30111	A-30311	A-30511	1-3/8
A-28112	A-28312	A-28512	A-29112	A-29312	A-29512	A-30112	A-30312	A-30512	1-7/16
A-28113	A-28313	A-28513	A-29113	A-29313	A-29513	A-30113	A-30313	A-30513	1-1/2
A-28114	A-28314	A-28514	A-29114	A-29314	A-29514	A-30114	A-30314	A-30514	1-5/8
A-28115	A-28315	A-28515	A-29115	A-29315	A-29515	A-30115	A-30315	A-30515	1-3/4
A-28116	A-28316	A-28516	A-29116	A-29316	A-29516	A-30116	A-30316	A-30516	1-7/8
A-28117	A-28317	A-28517	A-29117	A-29317	A-29517	A-30117	A-30317	A-30517	1-15/16
A-28118	A-28318	A-28518	A-29118	A-29318	A-29518	A-30118	A-30318	A-30518	2
A-28119	A-28319	A-28519	A-29119	A-29319	A-29519	A-30119	A-30319	A-30519	2-1/8
A-28120	A-28320	A-28520	A-29120	A-29320	A-29520	A-30120	A-30320	A-30520	2-1/4
A-28121	A-28321	A-28521	A-29121	A-29321	A-29521	A-30121	A-30321	A-30521	2-3/8
A-28122	A-28322	A-28522	A-29122	A-29322	A-29522	A-30122	A-30322	A-30522	2-1/2
A-28123	A-28323	A-28523	A-29123	A-29323	A-29523	A-30123	A-30323	A-30523	2-5/8
A-28124	A-28324	A-28524	A-29124	A-29324	A-29524	A-30124	A-30324	A-30524	2-3/4
A-28125	A-28325	A-28525	A-29125	A-29325	A-29525	A-30125	A-30325	A-30525	3
A-28126	A-28326	A-28526	A-29126	A-29326	A-29526	A-30126	A-30326	A-30526	3-1/4
A-28127	A-28327	A-28527	A-29127	A-29327	A-29527	A-30127	A-30327	A-30527	3-1/2
A-28128	A-28328	A-28528	A-29128	A-29328	A-29528	A-30128	A-30328	A-30528	3-3/4
A-28129	A-28329	A-28529	A-29129	A-29329	A-29529	A-30129	A-30329	A-30529	4
A-28129-A	A-28329-A	A-28529-A	A-29129-A	A-29329-A	A-29529-A	A-30129-A	A-30329-A	A-30529-A	4-1/4
A-28129-B	A-28329-B	A-28529-B	A-29129-B	A-29329-B	A-29529-B	A-30129-B	A-30329-B	A-30529-B	4-1/2
A-28129-C	A-28329-C	A-28529-C	A-29129-C	A-29329-C	A-29529-C	A-30129-C	A-30329-C	A-30529-C	4-3/4
A-28130	A-28330	A-28530	A-29130	A-29330	A-29530	A-30130	A-30330	A-30530	5
A-28130-A	A-28330-A	A-28530-A	A-29130-A	A-29330-A	A-29530-A	A-30130-A	A-30330-A	A-30530-A	5-1/4
A-28130-B	A-28330-B	A-28530-B	A-29130-B	A-29330-B	A-29530-B	A-30130-B	A-30330-B	A-30530-B	5-1/2
A-28130-C	A-28330-C	A-28530-C	A-29130-C	A-29330-C	A-29530-C	A-30130-C	A-30330-C	A-30530-C	5-3/4
A-28131	A-28331	A-28531	A-29131	A-29331	A-29531	A-30131	A-30331	A-30531	6

TO SELECT LARGER 6-1/4" TO 15" LENGTHS, SEE NEXT TWO PAGES.

COLLAR A-A-28000 3-1/4 - 16 LH ADD I.D. SIZE TO LINERS			COLLAR A-A-29000 3-3/4 - 16 LH ADD I.D. SIZE TO LINERS			COLLAR A-30000 4-1/4 - 16 LH ADD I.D. SIZE TO LINERS			See This Section
2-1/2	2-3/4	3	3	3-1/4	3-1/2	3-1/2	3-3/4	4	LINER
UCC-HNL-28160	UCC-HNL-28360	UCC-HNL-28560	UCC-HNL-29160	UCC-HNL-29360	UCC-HNL-29560	UCC-HNL-30160	UCC-HNL-30360	UCC-HNL-30560	HELICAL LOCK LINERS
UCC-521472	UCC-521472	UCC-521472	UCC-521474	UCC-521474	UCC-521474	UCC-521480	UCC-521480	UCC-521480	LOCK RINGS
UCC-HNLP-28160	UCC-HNLP-28360	UCC-HNLP-28560	UCC-HNLP-29160	UCC-HNLP-29360	UCC-HNLP-29560	UCC-HNLP-30160	UCC-HNLP-30360	UCC-HNLP-30560	HELICAL LOCK LINERS
UCC-LL-28160	UCC-LL-28360	UCC-LL-28560	UCC-LL-29160	UCC-LL-29360	UCC-LL-29560	UCC-LL-30160	UCC-LL-30360	UCC-LL-30560	LOCK LINERS
UCC-LLP-28160	UCC-LLP-28360	UCC-LLP-28560	UCC-LLP-29160	UCC-LLP-29360	UCC-LLP-29560	UCC-LLP-30160	UCC-LLP-30360	UCC-LLP-30560	LOCK LINERS
UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	LOCK SCREWS
TLC-6	TLC-6	TLC-6	TLC-7	TLC-7	TLC-7	TLC-7	TLC-7	TLC-7	TAPER LOCK CLAMPS
UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	STRIP MOUNTINGS

FOR REDUCERS AND SIZE INCREASING BUSHINGS, PLEASE REFER TO THIS SECTION.

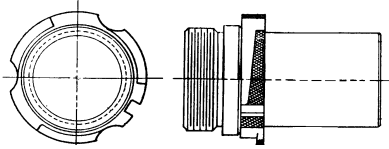
United's E-X-T-E-N-D-E-D Range Helical Nurlock

Note: LENGTHS 6-1/4" to 15" (1/2" to 6" pgs P12-P13)

A-26000 SERIES

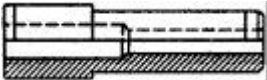
A-27000 SERIES

EXTENDED RANGE ACCEPTS DRILLS AS LARGE AS 3-9/16", WITH INSIDE SHANKS AS LONG AS 15"



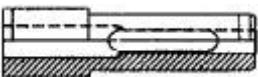
TOLERANCES ON 'A' DIMENSION
 1/2 to 3/4 +.0001 to .0006 1-3/8 to 1-3/4 +.0006 to .0010
 3/4 to 1-1/4 +.0003 to .0009 1-3/4 to 2-1/4 +.0008 to .0012
 1-1/4 to 1-3/4 +.0005 to .0009 2-1/4 to 3-9/16 +.0010 to .0015

TOLERANCES ON 'B' DIMENSION
 1-1/2 to 2" +.0002 to .0005 3" to 3-3/8 +.0004 to .0008
 2-1/8 to 2-3/8 +.0003 to .0006 3-1/2 to 4" +.0005 to .0009



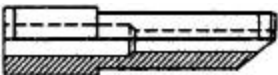
UDB-27567-7/16
OMIT 'A'

EXTENDED RANGE SHANK ONLY —FOR SHANK ONLY, OMIT PREFIX A. Example: UDB-27567



UDB-A-27567CS-7/16
ADD 'CS'

CHIP SLOT —SPECIFY A CHIP SLOT ON LONGER SHANKS, ADD SUFFIX CS. Ex: UDB-A-27567CS-7/16



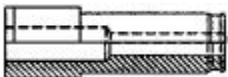
UDB-CTA-27567-7/16
PREFIX 'CT'

CONTOUR SURFACES —FOR CONTOUR SURFACES, USE OUR ANGULAR NOSE SHANK. ADD PREFIX CT. Example: UDB-CTA-27567-7/16



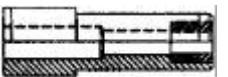
UDB-A-27567CC-7/16
ADD 'CC'

CHIP CUTTER —TO SPECIFY UNITED'S NEW PROPRIETARY CHIP CUTTER, ADD SUFFIX CC TO PART NO. Example: UDB-A-27567CC-7/16



UDB-A27567EZ-7/16
ADD 'EZ'

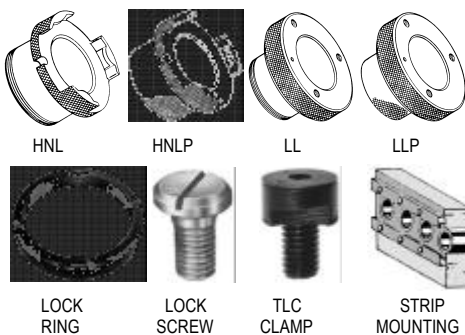
EASE IN RADIUS —TO SPECIFY UNITED'S NEW O.D. EASE IN RADIUS, ADD SUFFIX EZ TO PART NO. Example: UDB-A-27567EZ-7/16



UDB-AU-27567-7/16
Insert 'U' for ULTRA III
UDB-AC-27567-7/16
Insert 'C' for CARBIDE

LONG WEARING INSERTS —TO ORDER LONG WEARING INSERTS FOR FIVE TIMES WEAR, SPECIFY PREFIX AU FOR ULTRA III MATERIAL. FOR TEN TIMES WEAR, SPECIFY PREFIX AC FOR CARBIDE.

LOCK LINERS In This Section



HNL

HNLP

LL

LLP

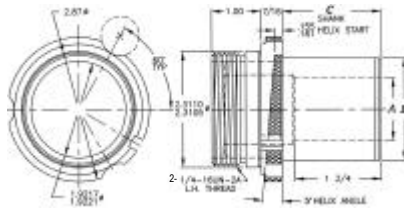
LOCK RING

LOCK SCREW

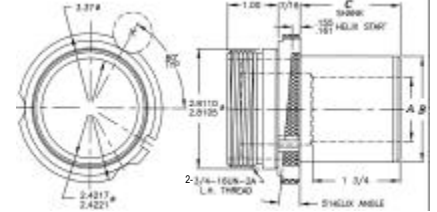
TLC CLAMP

STRIP MOUNTING

2-1/4 - 16 LH



2-3/4 - 16 LH



(DRILL) A	MAX	1-5/16 = 1.312	1-9/16 = 1.562	1-23/32 = 1.7187	1-13/16 = 1.812	2 = 2.00	2-1/16 = 2.062	
A	MIN	3/8 = .375	3/8 = .75	3/8 = .375	7/16 = .437	7/16 = .437	7/16 = .437	
(SHANK OD) B		1-1/2 = 1.50	1-3/4 = 1.75	2 = 2.00	2 = 2.00	2-3/8 = 2.37	2-1/2 = 2.50	
C	6-1/4	6.25	A-26132	A-26332	A-26532	A-27132	A-27332	A-27532
	6-1/2	6.50	A-26133	A-26333	A-26533	A-27133	A-27333	A-27533
L	6-3/4	6.75	A-26134	A-26334	A-26534	A-27134	A-27334	A-27534
E	7	7.00	A-26135	A-26335	A-26535	A-27135	A-27335	A-27535
N	7-1/4	7.25	A-26136	A-26336	A-26536	A-27136	A-27336	A-27536
G	7-1/2	7.50	A-26137	A-26337	A-26537	A-27137	A-27337	A-27537
T	7-3/4	7.75	A-26138	A-26338	A-26538	A-27138	A-27338	A-27538
H	8	8.00	A-26139	A-26339	A-26539	A-27139	A-27339	A-27539
	8-1/4	8.25	A-26140	A-26340	A-26540	A-27140	A-27340	A-27540
E	8-1/2	8.50	A-26141	A-26341	A-26541	A-27141	A-27341	A-27541
X	8-3/4	8.75	A-26142	A-26342	A-26542	A-27142	A-27342	A-27542
T	9	9.00	A-26143	A-26343	A-26543	A-27143	A-27343	A-27543
E	9-1/4	9.25	A-26144	A-26344	A-26544	A-27144	A-27344	A-27544
N	9-1/2	9.50	A-26145	A-26345	A-26545	A-27145	A-27345	A-27545
D	9-3/4	9.75	A-26146	A-26346	A-26546	A-27146	A-27346	A-27546
S	10	10.00	A-26147	A-26347	A-26547	A-27147	A-27347	A-27547
	10-1/4	10.25	A-26148	A-26348	A-26548	A-27148	A-27348	A-27548
F	10-1/2	10.50	A-26149	A-26349	A-26549	A-27149	A-27349	A-27549
R	10-3/4	10.75	A-26150	A-26350	A-26550	A-27150	A-27350	A-27550
O	11	11.00	A-26151	A-26351	A-26551	A-27151	A-27351	A-27551
M	11-1/4	11.25	A-26152	A-26352	A-26552	A-27152	A-27352	A-27552
	11-1/2	11.50	A-26153	A-26353	A-26553	A-27153	A-27353	A-27553
C	11-3/4	11.75	A-26154	A-26354	A-26554	A-27154	A-27354	A-27554
O	12	12.00	A-26155	A-26355	A-26555	A-27155	A-27355	A-27555
L	12-1/4	12.25	A-26156	A-26356	A-26556	A-27156	A-27356	A-27556
L	12-1/2	12.50	A-26157	A-26357	A-26557	A-27157	A-27357	A-27557
A	12-3/4	12.75	A-26158	A-26358	A-26558	A-27158	A-27358	A-27558
R	13	13.00	A-26159	A-26359	A-26559	A-27159	A-27359	A-27559
	13-1/4	13.25	A-26160	A-26360	A-26560	A-27160	A-27360	A-27560
I	13-1/2	13.50	A-26161	A-26361	A-26561	A-27161	A-27361	A-27561
N	13-3/4	13.75	A-26162	A-26362	A-26562	A-27162	A-27362	A-27562
C	14	14.00	A-26163	A-26363	A-26563	A-27163	A-27363	A-27563
H	14-1/4	14.25	A-26164	A-26364	A-26564	A-27164	A-27364	A-27564
E	14-1/2	14.50	A-26165	A-26365	A-26565	A-27165	A-27365	A-27565
S	14-3/4	14.75	A-26166	A-26366	A-26566	A-27166	A-27366	A-27566
	15	15.00	A-26167	A-26367	A-26567	A-27167	A-27367	A-27567

TO SELECT SMALLER 1/2" TO 6" LENGTHS, SEE PREVIOUS TWO PAGES.

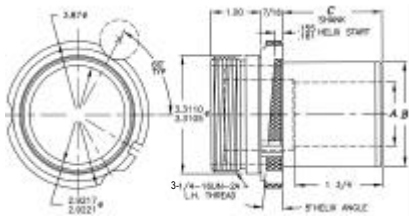
ACCESSORIES BELOW	COLLAR A-26000 2-1/4 - 16 LH ADD I.D. SIZE TO LINERS			COLLAR A-27000 2-3/4 - 16 LH ADD I.D. SIZE TO LINERS		
	1-1/2	1-3/4	2	2	2-3/8	2-1/2
HELICAL LOCK LINERS	UCC-HNL-26160	UCC-HNL-26360	UCC-HNL-26560	UCC-HNL-27160	UCC-HNL-27360	UCC-HNL-27560
LOCK RINGS	UCC-521458A	UCC-521458A	UCC-521458A	UCC-521470	UCC-521470	UCC-521470
HELICAL LOCK LINERS	UCC-HNLP-26160	UCC-HNLP-26360	UCC-HNLP-26560	UCC-HNLP-27160	UCC-HNLP-27360	UCC-HNLP-27560
LOCK LINERS	UCC-LL-26160	UCC-LL-26360	UCC-LL-26560	UCC-LL-27160	UCC-LL-27360	UCC-LL-27560
LOCK LINERS	UCC-LLP-26160	UCC-LLP-26360	UCC-LLP-26560	UCC-LLP-27160	UCC-LLP-27360	UCC-LLP-27560
LOCK SCREWS	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16
TAPER LOCK CLAMPS	TLC-3	TLC-3	TLC-3	TLC-6	TLC-6	TLC-6
STRIP MOUNTINGS	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX

FOR REDUCERS AND SIZE INCREASING BUSHINGS, PLEASE REFER TO THIS SECTION.

Bushing Tips, Lock Liners and Accessories

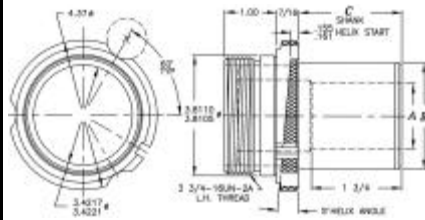
A-28000 SERIES

3-1/4 - 16 LH



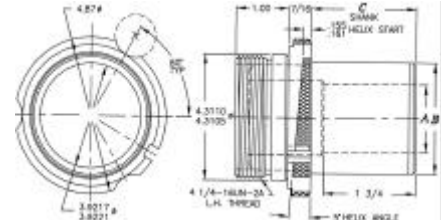
A-29000 SERIES

3-3/4 - 16 LH



A-30000 SERIES

4-1/4 - 16 LH



LENGTHS
6-1/4" to 15"

2-1/8 = 2.125	2-3/8 = 2.375	2-9/16 = 2.562	2-5/8 = 2.625	2-7/8 = 2.875	3-1/16 = 3.062	3-1/8 = 3.125	3-3/8 = 3.375	3-9/16 = 3.562	C =
1/2 = .500	1/2 = .500	1/2 = .500	9/16 = .562	9/16 = .562	9/16 = .562	5/8 = .625	5/8 = .625	5/8 = .625	SHANK
2-1/2 = 2.50	2-3/4 = 2.75	3 = 3.00	3 = 3.00	3-1/4 = 3.25	3-1/2 = 3.50	3-1/2 = 3.50	3-3/4 = 3.75	4 = 4.00	LEN
A-28132	A-28332	A-28532	A-29132	A-29332	A-29532	A-30132	A-30332	A-30532	6-1/4
A-28133	A-28333	A-28533	A-29133	A-29333	A-29533	A-30133	A-30333	A-30533	6-1/2
A-28134	A-28334	A-28534	A-29134	A-29334	A-29534	A-30134	A-30334	A-30534	6-3/4
A-28135	A-28335	A-28535	A-29135	A-29335	A-29535	A-30135	A-30335	A-30535	7
A-28136	A-28336	A-28536	A-29136	A-29336	A-29536	A-30136	A-30336	A-30536	7-1/4
A-28137	A-28337	A-28537	A-29137	A-29337	A-29537	A-30137	A-30337	A-30537	7-1/2
A-28138	A-28338	A-28538	A-29138	A-29338	A-29538	A-30138	A-30338	A-30538	7-3/4
A-28139	A-28339	A-28539	A-29139	A-29339	A-29539	A-30139	A-30339	A-30539	8
A-28140	A-28340	A-28540	A-29140	A-29340	A-29540	A-30140	A-30340	A-30540	8-1/4
A-28141	A-28341	A-28541	A-29141	A-29341	A-29541	A-30141	A-30341	A-30541	8-1/2
A-28142	A-28342	A-28542	A-29142	A-29342	A-29542	A-30142	A-30342	A-30542	8-3/4
A-28143	A-28343	A-28543	A-29143	A-29343	A-29543	A-30143	A-30343	A-30543	9
A-28144	A-28344	A-28544	A-29144	A-29344	A-29544	A-30144	A-30344	A-30544	9-1/4
A-28145	A-28345	A-28545	A-29145	A-29345	A-29545	A-30145	A-30345	A-30545	9-1/2
A-28146	A-28346	A-28546	A-29146	A-29346	A-29546	A-30146	A-30346	A-30546	9-3/4
A-28147	A-28347	A-28547	A-29147	A-29347	A-29547	A-30147	A-30347	A-30547	10
A-28148	A-28348	A-28548	A-29148	A-29348	A-29548	A-30148	A-30348	A-30548	10-1/4
A-28149	A-28349	A-28549	A-29149	A-29349	A-29549	A-30149	A-30349	A-30549	10-1/2
A-28150	A-28350	A-28550	A-29150	A-29350	A-29550	A-30150	A-30350	A-30550	10-3/4
A-28151	A-28351	A-28551	A-29151	A-29351	A-29551	A-30151	A-30351	A-30551	11
A-28152	A-28352	A-28552	A-29152	A-29352	A-29552	A-30152	A-30352	A-30552	11-1/4
A-28153	A-28353	A-28553	A-29153	A-29353	A-29553	A-30153	A-30353	A-30553	11-1/2
A-28154	A-28354	A-28554	A-29154	A-29354	A-29554	A-30154	A-30354	A-30554	11-3/4
A-28155	A-28355	A-28555	A-29155	A-29355	A-29555	A-30155	A-30355	A-30555	12
A-28156	A-28356	A-28556	A-29156	A-29356	A-29556	A-30156	A-30356	A-30556	12-1/4
A-28157	A-28357	A-28557	A-29157	A-29357	A-29557	A-30157	A-30357	A-30557	12-1/2
A-28158	A-28358	A-28558	A-29158	A-29358	A-29558	A-30158	A-30358	A-30558	12-3/4
A-28159	A-28359	A-28559	A-29159	A-29359	A-29559	A-30159	A-30359	A-30559	13
A-28160	A-28360	A-28560	A-29160	A-29360	A-29560	A-30160	A-30360	A-30560	13-1/4
A-28161	A-28361	A-28561	A-29161	A-29361	A-29561	A-30161	A-30361	A-30561	13-1/2
A-28162	A-28362	A-28562	A-29162	A-29362	A-29562	A-30162	A-30362	A-30562	13-3/4
A-28163	A-28363	A-28563	A-29163	A-29363	A-29563	A-30163	A-30363	A-30563	14
A-28164	A-28364	A-28564	A-29164	A-29364	A-29564	A-30164	A-30364	A-30564	14-1/4
A-28165	A-28365	A-28565	A-29165	A-29365	A-29565	A-30165	A-30365	A-30565	14-1/2
A-28166	A-28366	A-28566	A-29166	A-29366	A-29566	A-30166	A-30366	A-30566	14-3/4
A-28167	A-28367	A-28567	A-29167	A-29367	A-29567	A-30167	A-30367	A-30567	15

TO SELECT SMALLER 1/2" TO 6" LENGTHS, SEE PREVIOUS TWO PAGES.

COLLAR A-28000 3-1/4 - 16 LH ADD I.D. SIZE TO LINERS			COLLAR A-29000 3-3/4 - 16 LH ADD I.D. SIZE TO LINERS			COLLAR A-30000 4-1/4 - 16 LH ADD I.D. SIZE TO LINERS			See This Section
2-1/2	2-3/4	3	3	3-1/4	3-1/2	3-1/2	3-3/4	4	LINER
UCC-HNL-28160	UCC-HNL-28360	UCC-HNL-28560	UCC-HNL-29160	UCC-HNL-29360	UCC-HNL-29560	UCC-HNL-30160	UCC-HNL-30360	UCC-HNL-30560	HELICAL LOCK LINERS
UCC-521472	UCC-521472	UCC-521472	UCC-521474	UCC-521474	UCC-521474	UCC-521480	UCC-521480	UCC-521480	LOCK RINGS
UCC-HNLP-28160	UCC-HNLP-28360	UCC-HNLP-28560	UCC-HNLP-29160	UCC-HNLP-29360	UCC-HNLP-29560	UCC-HNLP-30160	UCC-HNLP-30360	UCC-HNLP-30560	HELICAL LOCK LINERS
UCC-LL-28160	UCC-LL-28360	UCC-LL-28560	UCC-LL-29160	UCC-LL-29360	UCC-LL-29560	UCC-LL-30160	UCC-LL-30360	UCC-LL-30560	LOCK LINERS
UCC-LLP-28160	UCC-LLP-28360	UCC-LLP-28560	UCC-LLP-29160	UCC-LLP-29360	UCC-LLP-29560	UCC-LLP-30160	UCC-LLP-30360	UCC-LLP-30560	LOCK LINERS
UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	UCC-16530-3/8-16	LOCK SCREWS
TLC-6	TLC-6	TLC-6	TLC-7	TLC-7	TLC-7	TLC-7	TLC-7	TLC-7	TAPER LOCK CLAMPS
UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	UDB-LSM-XXX	STRIP MOUNTINGS

FOR REDUCERS AND SIZE INCREASING BUSHINGS, PLEASE REFER TO THIS SECTION.

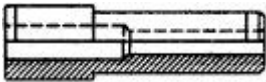
Nurlock WearEver Carbide I.D.s



UP TO TEN
TIMES MORE
WEAR LIFE!

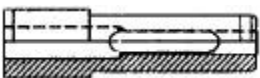


TOLERANCE ON 'A' DIMENSION	
UP TO 1/4	+0.001 TO +0.004
OVER 1/4 TO 3/4	+0.001 TO +0.005
OVER 3/4 TO 1-1/2	+0.002 TO +0.006
TOLERANCE ON 'B' DIM. — .0002 TO —.0005	



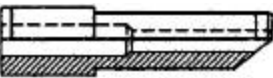
UDB-C-22531-3/16
OMIT 'A'

EXTENDED RANGE SHANK ONLY —FOR SHANK ONLY, OMIT PREFIX A. Example: UDB-C-22531



UDB-AC-22531CS-3/16
ADD 'CS'

CHIP SLOT —SPECIFY A CHIP SLOT ON LONGER SHANKS, ADD SUFFIX CS. Ex: UDB-AC-22531CS-3/16



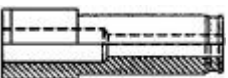
UDB-CTAC-22531-3/16
PREFIX 'CT'

CONTOUR SURFACES —FOR CONTOUR SURFACES, USE OUR ANGULAR NOSE SHANK. ADD PREFIX CT. Example: UDB-CTAC-22531-3/16



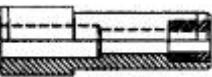
UDB-AC-22531CC-3/16
ADD 'CC'

CHIP CUTTER —TO SPECIFY UNITED'S NEW PATENTED CHIP CUTTER, ADD SUFFIX CC TO PART NO. Example: UDB-AC-22531CC-3/16



UDB-AC-22531EZ-3/16
ADD 'EZ'

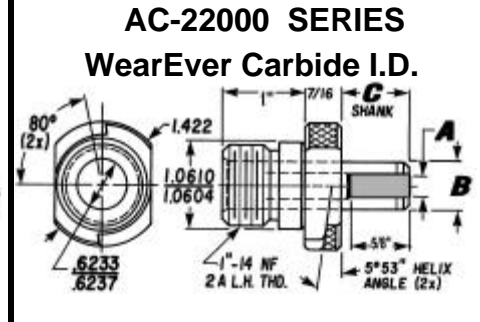
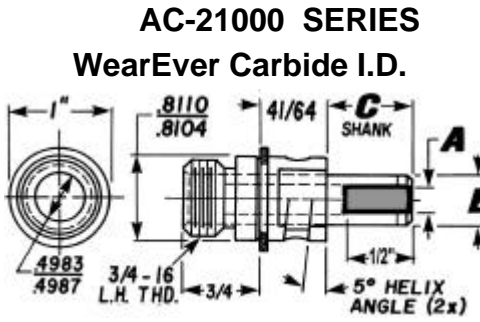
EASE IN RADIUS —TO SPECIFY UNITED'S NEW O.D. EASE IN RADIUS, ADD SUFFIX EZ TO PART NO. Example: UDB-AC-22531EZ-3/16



UDB-AU-22531-3/16
Insert 'U' for **ULTRA III**
UDB-AC-22531-3/16
Insert 'C' for **CARBIDE**

LONG WEARING INSERTS —TO ORDER LONG WEARING INSERTS FOR FIVE TIMES WEAR, SPECIFY PREFIX AU FOR ULTRA III MATERIAL. FOR TEN TIMES WEAR, SPECIFY PREFIX AC FOR CARBIDE.

LOCKING ACCESSORIES In This Section



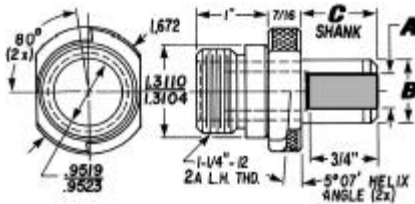
(DRILL) A	MAX	3/16	9/32	9/32	7/32	9/32	5/16	3/8	7/16
A	MIN	1/16	1/16	1/16	1/8	1/8	1/8	1/8	1/8
(SHANK OD) B		3/8	7/16	1/2	7/16	1/2	9/16	5/8	3/4
C	3/8	AC-21101		AC-21301	AC-22101			AC-22401	
	1/2	AC-21102	AC-21202	AC-21302	AC-22102	AC-22202		AC-22402	
L	5/8	AC-21103	AC-21203	AC-21303	AC-22103	AC-22203	AC-22303	AC-22403	
E	3/4	AC-21104	AC-21204	AC-21304	AC-22104	AC-22204	AC-22304	AC-22404	AC-22504
N	7/8	AC-21105	AC-21205	AC-21305	AC-22105	AC-22205	AC-22305	AC-22405	AC-22505
G	1	AC-21106	AC-21206	AC-21306	AC-22106	AC-22206	AC-22306	AC-22406	AC-22506
T	1-1/16	AC-21107		AC-21307					
H	1-1/8	AC-21108	AC-21208	AC-21308	AC-22108	AC-22208	AC-22308	AC-22408	AC-22508
	1-3/16							AC-22409	
F	1-1/4	AC-21110	AC-21210	AC-21310	AC-22110	AC-22210	AC-22310	AC-22410	AC-22510
R	1-3/8	AC-21111	AC-21211	AC-21311	AC-22111	AC-22211	AC-22311	AC-22411	AC-22511
O	1-7/16								
M	1-1/2	AC-21113	AC-21213	AC-21313	AC-22113	AC-22213	AC-22313	AC-22413	AC-22513
	1-5/8	AC-21114	AC-21214	AC-21314	AC-22114	AC-22214	AC-22314	AC-22414	AC-22514
C	1-3/4	AC-21115	AC-21215	AC-21315	AC-22115	AC-22215	AC-22315	AC-22415	AC-22515
O	1-7/8	AC-21116	AC-21216	AC-21316	AC-22116	AC-22216	AC-22316	AC-22416	AC-22516
L	1-15/16								
L	2	AC-21118	AC-21218	AC-21318	AC-22118	AC-22218	AC-22318	AC-22418	AC-22518
A	2-1/8	AC-21119	AC-21219	AC-21319	AC-22119	AC-22219	AC-22319	AC-22419	AC-22519
R	2-1/4	AC-21120	AC-21220	AC-21320	AC-22120	AC-22220	AC-22320	AC-22420	AC-22520
	2-3/8	AC-21121	AC-21221	AC-21321	AC-22121	AC-22221	AC-22321	AC-22421	AC-22521
I	2-1/2	AC-21122	AC-21222	AC-21322	AC-22122	AC-22222	AC-22322	AC-22422	AC-22522
N	2-5/8								
	2-3/4	AC-21124	AC-21224	AC-21324	AC-22124	AC-22224	AC-22324	AC-22424	AC-22524
I	3	AC-21125	AC-21225	AC-21325	AC-22125	AC-22225	AC-22325	AC-22425	AC-22525
N	3-1/4	AC-21126	AC-21226	AC-21326	AC-22126	AC-22226	AC-22326	AC-22426	AC-22526
C	3-1/2				AC-22127	AC-22227	AC-22327	AC-22427	AC-22527
H	3-3/4				AC-22128	AC-22228	AC-22328	AC-22428	AC-22528
E	4				AC-22129	AC-22229	AC-22329	AC-22429	AC-22529
S	5			AC-21330	AC-22130	AC-22230	AC-22330	AC-22430	AC-22530
	6	AC-21131			AC-22131	AC-22231	AC-22331	AC-22431	AC-22531

C SHANK LEN LENGTH		COLLAR AC-21000 ADD I.D. SIZE TO LINERS				COLLAR AC-22000 ADD I.D. SIZE TO LINERS			
		3/8	7/16	1/2	7/16	1/2	9/16	5/8	3/4
HELICAL NURLOCK LINERS	DOUBLE LOCK FOR METAL	HNL-213212	HNL-214808	HNL-214808	HNL-224808	HNL-224808	HNL-225210	HNL-225610	HNL-226410
FOR METAL TOOLING	SINGLE LOCK FOR METAL	HNL-1-213212	HNL-1-214808	HNL-1-214808	HNL-1-224808	HNL-1-224808	HNL-1-225210	HNL-1-225610	HNL-1-226410
STD NURLOCK LINERS	DOUBLE LOCK FOR METAL	NL-16520		NL-16521	WE RECOMMEND				
STD NURLOCK LINERS	DOUBLE LOCK FOR PLASTIC	NLP-375		NLP-500	HNL and HNL P				
LOCK LINERS	FOR METAL	LL-21100	LL-21200	LL-21300				LL-22400	
LOCK LINERS	FOR PLASTIC	NL-21100	NL-21200	NL-21300	NL-22100	NL-22200	NL-22300	NL-22400	
LOCK RINGS		UDB-521449	UDB-521450A	UDB-521450A	UDB-521451	UDB-521451	UDB-521451A	UDB-521451	UDB-521452
HELICAL NURLOCK LINERS	DOUBLE LOCK FOR PLASTIC	HNL P-213212	HNL P-214808	HNL P-214808	HNL P-224808	HNL P-224808	HNL P-225210	HNL P-225610	HNL P-226410
FOR PLASTIC TOOLING	SINGLE LOCK FOR PLASTIC	HNL P-1-213212	HNL P-1-214808	HNL P-1-214808	HNL P-1-224808	HNL P-1-224808	HNL P-1-225210	HNL P-1-225610	HNL P-1-226410
TAPERED NURLOCK CLAMPS		TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2
LINER BUSHINGS		19936	19937	19938	19937	19938	19939	19940	19941
LOCK SCREWS		16531	16531	16531	16532	16532	16532	16532	16532

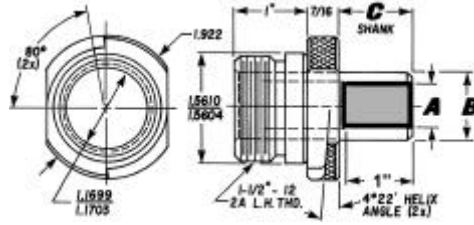
Shanks

UNITED WearEver Carbide I.D.S

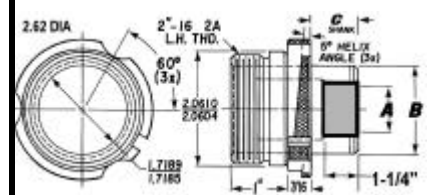
AC-23000 SERIES WearEver Carbide I.D.



AC-24000 SERIES WearEver Carbide I.D.



AC-25000 SERIES WearEver Carbide I.D.



AC-23000 SERIES						AC-24000 SERIES						AC-25000 SERIES								
15/32	17/32	19/32	21/32	23/32	3/4	15/32	17/32	19/32	21/32	25/32	29/32	15/16	1"	1-1/16	1-1/32	1-5/32	1-9/32	1-15/32	1-1/2	A MAX
1/4	1/4	1/4	1/4	1/4	1/4	5/16	5/16	5/16	5/16	5/16	5/16	5/16	5/16	5/16	3/8	3/8	3/8	3/8	3/8	A MIN
5/8	3/4	13/16	7/8	1	1-1/8	5/8	3/4	13/16	7/8	1	1-1/8	1-1/4	1-3/8	1-1/2	1-1/4	1-3/8	1-1/2	1-3/4	2	B
NEW O.D.	WearEver Carbide I.D.s					NEW O.D.	WearEver Carbide I.D.s					NEW O.D.	WearEver Carbide I.D.s					3/8		
BELOW	A Life-Long Relationship!					BELOW	A Life-Long Relationship!					BELOW	A Life-Long Relationship!					1/2		
						AC-24103									AC Means UNITED					5/8
															WearEver CARBIDE I.D.s.					3/4
AC-23004	AC-23104	AC-23204	AC-23304			AC-24104	AC-24304	AC-24204							All AC-25000 series and 16513 Drill Bushing Tips have three milled locking slats. Three Lock Screws are provided in Lock Liner Bushing A-16533. For direct jig mounting (without lock liner bushing) three Lock Screws must be provided. Use new HNL and HNL P Liners.					7/8
AC-23005	AC-23105	AC-23205	AC-23305			AC-24105	AC-24305	AC-24205	AC-24405											1
AC-23006	AC-23106	AC-23206	AC-23306	AC-23406	AC-23506	AC-24106	AC-24306	AC-24206	AC-24406	AC-24506	AC-24606		AC-24906	AC-24806						1-1/16
AC-23008	AC-23108	AC-23208	AC-23308	AC-23408	AC-23508	AC-24108	AC-24308	AC-24208	AC-24408	AC-24508	AC-24608		AC-24908							1-1/8
AC-23010	AC-23110	AC-23210	AC-23310	AC-23410	AC-23510	AC-24110	AC-24310	AC-24210	AC-24410	AC-24510	AC-24610	AC-24710			AC-25110					1-3/16
AC-23011	AC-23111	AC-23211	AC-23311	AC-23411	AC-23511	AC-24111	AC-24311	AC-24211	AC-24411	AC-24511	AC-24611	AC-24711	AC-24911	AC-24811	AC-25111	AC-25211				1-3/8
			AC-23312																	1-7/16
AC-23013	AC-23113	AC-23213	AC-23313	AC-23413	AC-23513	AC-24113	AC-24313	AC-24213	AC-24413	AC-24513	AC-24613	AC-24713	AC-24913	AC-24813	AC-25113	AC-25213	AC-25313			1-1/2
AC-23014	AC-23114	AC-23214	AC-23314	AC-23414	AC-23514	AC-24114	AC-24314	AC-24214	AC-24414	AC-24514	AC-24614	AC-24714	AC-24914	AC-24814	AC-25114	AC-25214	AC-25314			1-5/8
AC-23015	AC-23115	AC-23215	AC-23315	AC-23415	AC-23515	AC-24115	AC-24315	AC-24215	AC-24415	AC-24515	AC-24615	AC-24715	AC-24915	AC-24815	AC-25115	AC-25215	AC-25315	AC-25415		1-3/4
AC-23016	AC-23116	AC-23216	AC-23316	AC-23416	AC-23516	AC-24116	AC-24316	AC-24216	AC-24416	AC-24516	AC-24616	AC-24716	AC-24916	AC-24816	AC-25116	AC-25216	AC-25316	AC-25416		1-7/8
				AC-23517							AC-24617		AC-24817							1-15/16
AC-23018	AC-23118	AC-23218	AC-23318	AC-23418	AC-23518	AC-24118	AC-24318	AC-24218	AC-24418	AC-24518	AC-24618	AC-24718	AC-24918	AC-24818	AC-25118	AC-25218	AC-25318	AC-25418	AC-25518	2
AC-23019	AC-23119	AC-23219	AC-23319	AC-23419	AC-23519	AC-24119	AC-24319	AC-24219	AC-24419	AC-24519	AC-24619	AC-24719	AC-24919	AC-24819	AC-25119	AC-25219	AC-25319	AC-25419		2-1/8
AC-23020	AC-23120	AC-23220	AC-23320	AC-23420	AC-23520	AC-24120	AC-24320	AC-24220	AC-24420	AC-24520	AC-24620	AC-24720	AC-24920	AC-24820	AC-25120	AC-25220	AC-25320	AC-25420		2-1/4
AC-23021	AC-23121	AC-23221	AC-23321	AC-23421	AC-23521	AC-24121	AC-24321	AC-24221	AC-24421	AC-24521	AC-24621	AC-24721	AC-24921	AC-24821	AC-25121	AC-25221	AC-25321	AC-25421		2-3/8
AC-23022	AC-23122	AC-23222	AC-23322	AC-23422	AC-23522	AC-24122	AC-24322	AC-24222	AC-24422	AC-24522	AC-24622	AC-24722	AC-24922	AC-24822	AC-25122	AC-25222	AC-25322	AC-25422		2-1/2
																			AC-25523	2-5/8
AC-23024	AC-23124	AC-23224	AC-23324	AC-23424	AC-23524	AC-24124	AC-24324	AC-24224	AC-24424	AC-24524	AC-24624	AC-24724	AC-24924	AC-24824	AC-25124	AC-25224	AC-25324	AC-25424	AC-25524	2-3/4
AC-23025	AC-23125	AC-23225	AC-23325	AC-23425	AC-23525	AC-24125	AC-24325	AC-24225	AC-24425	AC-24525	AC-24625	AC-24725	AC-24925	AC-24825	AC-25125	AC-25225	AC-25325	AC-25425	AC-25525	3
AC-23026	AC-23126	AC-23226	AC-23326	AC-23426	AC-23526	AC-24126	AC-24326	AC-24226	AC-24426	AC-24526	AC-24626	AC-24726	AC-24926	AC-24826	AC-25126	AC-25226	AC-25326	AC-25426	AC-25526	3-1/4
AC-23027	AC-23127	AC-23227	AC-23327	AC-23427	AC-23527	AC-24127	AC-24327	AC-24227	AC-24427	AC-24527	AC-24627	AC-24727	AC-24927	AC-24827	AC-25127	AC-25227	AC-25327	AC-25427	AC-25527	3-1/2
AC-23028	AC-23128	AC-23228	AC-23328	AC-23428	AC-23528	AC-24128	AC-24328	AC-24228	AC-24428	AC-24528	AC-24628	AC-24728	AC-24928	AC-24828	AC-25128	AC-25228	AC-25328	AC-25428	AC-25528	3-3/4
AC-23029	AC-23129	AC-23229	AC-23329	AC-23429	AC-23529	AC-24129	AC-24329	AC-24229	AC-24429	AC-24529	AC-24629	AC-24729	AC-24929	AC-24829	AC-25129	AC-25229	AC-25329	AC-25429	AC-25529	4
AC-23030	AC-23130	AC-23230	AC-23330	AC-23430	AC-23530	AC-24130	AC-24330	AC-24230	AC-24430	AC-24530	AC-24630	AC-24730	AC-24930	AC-24830	AC-25130	AC-25230	AC-25330	AC-25430	AC-25530	5
AC-23031	AC-23131	AC-23231	AC-23331	AC-23431	AC-23531	AC-24131	AC-24331	AC-24231	AC-24431	AC-24531	AC-24631	AC-24731	AC-24931	AC-24831	AC-25131	AC-25231	AC-25331	AC-25431	AC-25531	6
COLLAR AC-23000 ADD I.D. SIZE TO LINERS						COLLAR AC-24000 ADD I.D. SIZE TO LINERS						COLLAR AC-25000 ADD I.D. SIZE TO LINERS						C		
5/8	3/4	13/16	7/8	1	1-1/8	5/8	3/4	13/16	7/8	1	1-1/8	1-1/4	1-3/8	1-1/2	1-1/4	1-3/8	1-1/2	1-3/4	2	LINER I.D.
HNL-235610	HNL-236410	HNL-236410	HNL-238016	HNL-239616	HNL-239624	HNL-245616	HNL-246416	HNL-246416	HNL-248016	HNL-248016	HNL-248816	HNL-249616	HNL-2411216	HNL-2412816	HNL-25100	HNL-25200	HNL-25300	HNL-25400	HNL-25500	HELICAL NURLOCK LINERS
HNL-1-235610	HNL-1-236410	HNL-1-236410	HNL-1-238016	HNL-1-239616	HNL-1-239624	HNL-1-245616	HNL-1-246416	HNL-1-246416	HNL-1-248016	HNL-1-248016	HNL-1-248816	HNL-1-249616	HNL-1-2411216	HNL-1-2412816	WE RECOMMEND					HELICAL NURLOCK LINERS SINGLE
			NL-16523		NL-16524							NL-16525		NL-16526	HNL and HNL P					NL-16533
			NLP-16523		NLP-16524							NLP-16525		NLP-16526						NLP-16533
																				STD NURLOCK LINERS
																				LOOK LINERS
																				LOOK LINERS
UDB-521453A	UDB-521452	UDB-521452	UDB-521453	UDB-521454B	UDB-521454A	UDB-521451	UDB-521452	UDB-521452	UDB-521453	UDB-521453	UDB-521454	UDB-521454B	UDB-521456A	UDB-521457A	UDB-521458A	UDB-521458A	UDB-521458A	UDB-521458A	UDB-521458A	LOOK RINGS
HNL P-235610	HNL P-236410	HNL P-236410	HNL P-238016	HNL P-239616	HNL P-239624	HNL P-245616	HNL P-246416	HNL P-246416	HNL P-248016	HNL P-248016	HNL P-248816	HNL P-249616	HNL P-2411216	HNL P-2412816	HNL P-25100	HNL P-25200	HNL P-25300	HNL P-25400	HNL P-25500	HELICAL NURLOCK LINERS DOUBLE
HNL P-1-235610	HNL P-1-236410	HNL P-1-236410	HNL P-1-238016	HNL P-1-239616	HNL P-1-239624	HNL P-1-245616	HNL P-1-246416	HNL P-1-246416	HNL P-1-248016	HNL P-1-248016	HNL P-1-248816	HNL P-1-249616	HNL P-1-2411216	HNL P-1-2412816						HELICAL NURLOCK LINERS SINGLE
TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-3	TLC-3	TLC-3	TLC-3	TLC-3	HYBRID CLAMPS
19940	19942	19943	19944	19945	19946	19940	19942	19943	19944	19945	19946	19952	19954	19955	19952	19954	19955	19956	19957	LINER BUSHINGS
16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16530	16530	16530	16530	16530	LOOK SCREWS

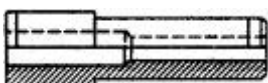
ULTRA III Adapter Tips and Accessories



RA III A

See complete DIMENSIONAL TOLERANCES Pages P10 thru P15.

TOLERANCE ON 'A' DIMENSION	
UP TO 1/4	+0.001 TO +0.004
OVER 1/4 TO 3/4	+0.001 TO +0.005
OVER 3/4 TO 1-1/2	+0.002 TO +0.006
TOLERANCE ON 'B' DIM. —.0002 TO —.0005	



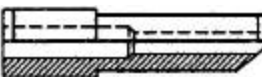
UDB-U-22531-3/16
OMIT 'A'

EXTENDED RANGE SHANK ONLY —FOR SHANK ONLY, OMIT PREFIX A. Example: UDB-U-22531



UDB-AU-22531CS-3/16
ADD 'CS'

CHIP SLOT —SPECIFY A CHIP SLOT ON LONGER SHANKS, ADD SUFFIX CS. Ex: UDB-AU-22531CS-3/16



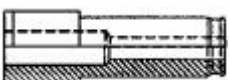
UDB-CTAU-22531-3/16
PREFIX 'CT'

CONTOUR SURFACES —FOR CONTOUR SURFACES, USE OUR ANGULAR NOSE SHANK. ADD PREFIX CT. Example: UDB-CTAU-22531-3/16



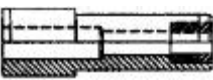
UDB-AU-22531CC-3/16
ADD 'CC'

CHIP CUTTER —TO SPECIFY UNITED'S NEW PATENTED CHIP CUTTER, ADD SUFFIX CC TO PART NO. Example: UDB-AU-22531CC-3/16



UDB-AU-22531EZ-3/16
ADD 'EZ'

EASE IN RADIUS —TO SPECIFY UNITED'S NEW O.D. EASE IN RADIUS, ADD SUFFIX EZ TO PART NO. Example: UDB-AU-22531EZ-3/16



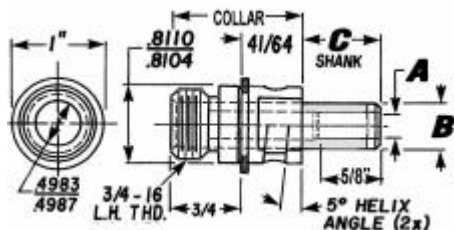
UDB-AU-22531-3/16
Insert 'U' for **ULTRA III**
UDB-AC-22531-3/16
Insert 'C' for **CARBIDE**

LONG WEARING INSERTS —TO ORDER LONG WEARING INSERTS FOR FIVE TIMES WEAR, SPECIFY PREFIX AU FOR ULTRA III MATERIAL. FOR TEN TIMES WEAR, SPECIFY PREFIX AC FOR CARBIDE.

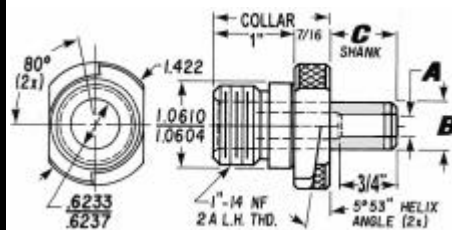
LOCKING ACCESSORIES in this Section



AU-21000 SERIES



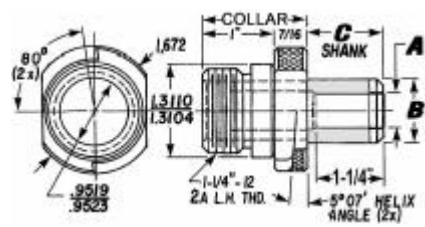
AU-22000 SERIES



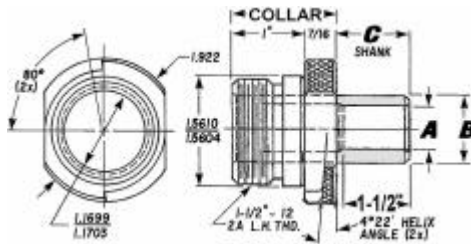
(DRILL) A	MAX	1/4	5/16	3/8	9/32	11/32	13/32	15/32	15/32
A	MIN	3/32	3/32	3/32	3/16	3/16	3/16	3/16	3/16
(SHANK OD) B		3/8	7/16	1/2	7/16	1/2	9/16	5/8	3/4
C	3/8	AU-21101		AU-21301	AU-22101			AU-22401	
	1/2	AU-21102	AU-21202	AU-21302	AU-22102	AU-22202		AU-22402	
L	5/8	AU-21103	AU-21203	AU-21303	AU-22103	AU-22203	AU-22303	AU-22403	
E	3/4	AU-21104	AU-21204	AU-21304	AU-22104	AU-22204	AU-22304	AU-22404	AU-22504
N	7/8	AU-21105	AU-21205	AU-21305	AU-22105	AU-22205	AU-22305	AU-22405	AU-22505
G	1	AU-21106	AU-21206	AU-21306	AU-22106	AU-22206	AU-22306	AU-22406	AU-22506
T	1-1/16	AU-21107		AU-21307					
H	1-1/8	AU-21108	AU-21208	AU-21308	AU-22108	AU-22208	AU-22308	AU-22408	AU-22508
	1-3/16							AU-22409	
F	1-1/4	AU-21110	AU-21210	AU-21310	AU-22110	AU-22210	AU-22310	AU-22410	AU-22510
R	1-3/8	AU-21111	AU-21211	AU-21311	AU-22111	AU-22211	AU-22311	AU-22411	AU-22511
O	1-7/16								
M	1-1/2	AU-21113	AU-21213	AU-21313	AU-22113	AU-22213	AU-22313	AU-22413	AU-22513
	1-5/8	AU-21114	AU-21214	AU-21314	AU-22114	AU-22214	AU-22314	AU-22414	AU-22514
C	1-3/4	AU-21115	AU-21215	AU-21315	AU-22115	AU-22215	AU-22315	AU-22415	AU-22515
O	1-7/8	AU-21116	AU-21216	AU-21316	AU-22116	AU-22216	AU-22316	AU-22416	AU-22516
L	1-15/16								
L	2	AU-21118	AU-21218	AU-21318	AU-22118	AU-22218	AU-22318	AU-22418	AU-22518
A	2-1/8	AU-21119	AU-21219	AU-21319	AU-22119	AU-22219	AU-22319	AU-22419	AU-22519
R	2-1/4	AU-21120	AU-21220	AU-21320	AU-22120	AU-22220	AU-22320	AU-22420	AU-22520
	2-3/8	AU-21121	AU-21221	AU-21321	AU-22121	AU-22221	AU-22321	AU-22421	AU-22521
I	2-1/2	AU-21122	AU-21222	AU-21322	AU-22122	AU-22222	AU-22322	AU-22422	AU-22522
N	2-5/8								
	2-3/4	AU-21124	AU-21224	AU-21324	AU-22124	AU-22224	AU-22324	AU-22424	AU-22524
I	3	AU-21125	AU-21225	AU-21325	AU-22125	AU-22225	AU-22325	AU-22425	AU-22525
N	3-1/4	AU-21126	AU-21226	AU-21326	AU-22126	AU-22226	AU-22326	AU-22426	AU-22526
C	3-1/2				AU-22127	AU-22227	AU-22327	AU-22427	AU-22527
H	3-3/4				AU-22128	AU-22228	AU-22328	AU-22428	AU-22528
E	4				AU-22129	AU-22229	AU-22329	AU-22429	AU-22529
S	5			AU-21330	AU-22130	AU-22230	AU-22330	AU-22430	AU-22530
	6	AU-21131			AU-22131	AU-22231	AU-22331	AU-22431	AU-22531
C LENGTH ABOVE		COLLAR AU-21000 ADD I.D. SIZE TO LINERS			COLLAR AU-22000 ADD I.D. SIZE TO LINERS				
LINER I.D.		3/8	7/16	1/2	7/16	1/2	9/16	5/8	3/4
HELICAL NURLOCK LINERS	DOUBLE LOCK FOR METAL	HNL-213212	HNL-214808	HNL-214808	HNL-224808	HNL-224808	HNL-225210	HNL-225610	HNL-226410
HELICAL NURLOCK LINERS	SINGLE LOCK FOR METAL	HNL-1-213212	HNL-1-214808	HNL-1-214808	HNL-1-224808	HNL-1-224808	HNL-1-225210	HNL-1-225610	HNL-1-226410
STD NURLOCK LINERS	DOUBLE LOCK FOR METAL	NL-16520		NL-16521	WE RECOMMEND HNL and HNL P				
STD NURLOCK LINERS	DOUBLE LOCK FOR PLASTIC	NLP-375		NLP-500					
LOCK SCREW LINERS	FOR METAL	LL-21100	LL-21200	LL-21300					
LOCK SCREW LINERS	FOR PLASTIC	NL-21100	NL-21200	NL-21300	NL-22100	NL-22200	NL-22300	NL-22400	
LOCK RINGS		UDB-521449	UDB-521450A	UDB-521450A	UDB-521451	UDB-521451	UDB-521451A	UDB-521451	UDB-521452
HELICAL NURLOCK LINERS	DOUBLE LOCK FOR PLASTIC	HNLP-213212	HNLP-214808	HNLP-214808	HNLP-224808	HNLP-224808	HNLP-225210	HNLP-225610	HNLP-226410
FOR PLASTIC TOOLING	SINGLE LOCK FOR PLASTIC	HNLP-1-213212	HNLP-1-214808	HNLP-1-214808	HNLP-1-224808	HNLP-1-224808	HNLP-1-225210	HNLP-1-225610	HNLP-1-226410
TAPERED NURLOCK CLAMPS		TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2
LINER BUSHINGS		19936	19937	19938	19937	19938	19939	19940	19941
LOCK SCREWS		16531	16531	16531	16532	16532	16532	16532	16532

Shanks and Accessories ULTRA III Material

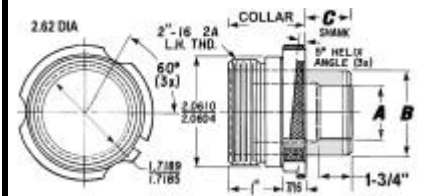
AU-23000 SERIES



AU-24000 SERIES



AU-25000 SERIES



AU-23000 SERIES						AU-24000 SERIES											AU-25000 SERIES						
15/32	17/32	19/32	21/32	23/32	3/4	15/32	17/32	19/32	21/32	25/32	29/32	15/16	1"	1-1/16	1-1/32	1-5/32	1-9/32	1-15/32	1-1/2	A MAX			
1/4	1/4	1/4	1/4	1/4	1/4	5/16	5/16	5/16	5/16	5/16	5/16	5/16	5/16	5/16	3/8	3/8	3/8	3/8	3/8	A MIN			
5/8	3/4	13/16	7/8	1	1-1/8	5/8	3/4	13/16	7/8	1	1-1/8	1-1/4	1-3/8	1-1/2	1-1/4	1-3/8	1-1/2	1-3/4	2	B			
NEW O.D.																							
BELOW																							
AU-23004	AU-23104	AU-23204	AU-23304			AU-24103																	
AU-23005	AU-23105	AU-23205	AU-23305			AU-24104	AU-24304	AU-24204															
AU-23006	AU-23106	AU-23206	AU-23306	AU-23406	AU-23506	AU-24105	AU-24305	AU-24205	AU-24405														
AU-23008	AU-23108	AU-23208	AU-23308	AU-23408	AU-23508	AU-24106	AU-24306	AU-24206	AU-24406	AU-24506	AU-24606		AU-24906	AU-24806									
AU-23010	AU-23110	AU-23210	AU-23310	AU-23410	AU-23510	AU-24108	AU-24308	AU-24208	AU-24408	AU-24508	AU-24608		AU-24908		AU-25110								
AU-23011	AU-23111	AU-23211	AU-23311	AU-23411	AU-23511	AU-24109	AU-24309	AU-24209	AU-24409	AU-24509	AU-24609		AU-24909	AU-24809	AU-25111	AU-25211							
			AU-23312																				
AU-23013	AU-23113	AU-23213	AU-23313	AU-23413	AU-23513	AU-24110	AU-24310	AU-24210	AU-24410	AU-24510	AU-24610		AU-24910	AU-24810	AU-25112	AU-25212							
AU-23014	AU-23114	AU-23214	AU-23314	AU-23414	AU-23514	AU-24111	AU-24311	AU-24211	AU-24411	AU-24511	AU-24611		AU-24911	AU-24811	AU-25113	AU-25213	AU-25313						
AU-23015	AU-23115	AU-23215	AU-23315	AU-23415	AU-23515	AU-24112	AU-24312	AU-24212	AU-24412	AU-24512	AU-24612		AU-24912	AU-24812	AU-25114	AU-25214	AU-25314						
AU-23016	AU-23116	AU-23216	AU-23316	AU-23416	AU-23516	AU-24113	AU-24313	AU-24213	AU-24413	AU-24513	AU-24613		AU-24913	AU-24813	AU-25115	AU-25215	AU-25315	AU-25415					
					AU-23517	AU-24114	AU-24314	AU-24214	AU-24414	AU-24514	AU-24614		AU-24914	AU-24814	AU-25116	AU-25216	AU-25316	AU-25416					
AU-23018	AU-23118	AU-23218	AU-23318	AU-23418	AU-23518	AU-24115	AU-24315	AU-24215	AU-24415	AU-24515	AU-24615		AU-24915	AU-24815	AU-25117	AU-25217	AU-25317	AU-25417	AU-25517				
AU-23019	AU-23119	AU-23219	AU-23319	AU-23419	AU-23519	AU-24116	AU-24316	AU-24216	AU-24416	AU-24516	AU-24616		AU-24916	AU-24816	AU-25118	AU-25218	AU-25318	AU-25418	AU-25518				
AU-23020	AU-23120	AU-23220	AU-23320	AU-23420	AU-23520	AU-24117	AU-24317	AU-24217	AU-24417	AU-24517	AU-24617		AU-24917	AU-24817	AU-25119	AU-25219	AU-25319	AU-25419					
AU-23021	AU-23121	AU-23221	AU-23321	AU-23421	AU-23521	AU-24118	AU-24318	AU-24218	AU-24418	AU-24518	AU-24618		AU-24918	AU-24818	AU-25120	AU-25220	AU-25320	AU-25420					
AU-23022	AU-23122	AU-23222	AU-23322	AU-23422	AU-23522	AU-24119	AU-24319	AU-24219	AU-24419	AU-24519	AU-24619		AU-24919	AU-24819	AU-25121	AU-25221	AU-25321	AU-25421					
						AU-24120	AU-24320	AU-24220	AU-24420	AU-24520	AU-24620		AU-24920	AU-24820	AU-25122	AU-25222	AU-25322	AU-25422					
AU-23024	AU-23124	AU-23224	AU-23324	AU-23424	AU-23524	AU-24121	AU-24321	AU-24221	AU-24421	AU-24521	AU-24621		AU-24921	AU-24821	AU-25123	AU-25223	AU-25323	AU-25423	AU-25523				
AU-23025	AU-23125	AU-23225	AU-23325	AU-23425	AU-23525	AU-24122	AU-24322	AU-24222	AU-24422	AU-24522	AU-24622		AU-24922	AU-24822	AU-25124	AU-25224	AU-25324	AU-25424	AU-25524				
AU-23026	AU-23126	AU-23226	AU-23326	AU-23426	AU-23526	AU-24123	AU-24323	AU-24223	AU-24423	AU-24523	AU-24623		AU-24923	AU-24823	AU-25125	AU-25225	AU-25325	AU-25425	AU-25525				
AU-23027	AU-23127	AU-23227	AU-23327	AU-23427	AU-23527	AU-24124	AU-24324	AU-24224	AU-24424	AU-24524	AU-24624		AU-24924	AU-24824	AU-25126	AU-25226	AU-25326	AU-25426	AU-25526				
AU-23028	AU-23128	AU-23228	AU-23328	AU-23428	AU-23528	AU-24125	AU-24325	AU-24225	AU-24425	AU-24525	AU-24625		AU-24925	AU-24825	AU-25127	AU-25227	AU-25327	AU-25427	AU-25527				
AU-23029	AU-23129	AU-23229	AU-23329	AU-23429	AU-23529	AU-24126	AU-24326	AU-24226	AU-24426	AU-24526	AU-24626		AU-24926	AU-24826	AU-25128	AU-25228	AU-25328	AU-25428	AU-25528				
AU-23030	AU-23130	AU-23230	AU-23330	AU-23430	AU-23530	AU-24127	AU-24327	AU-24227	AU-24427	AU-24527	AU-24627		AU-24927	AU-24827	AU-25129	AU-25229	AU-25329	AU-25429	AU-25529				
AU-23031	AU-23131	AU-23231	AU-23331	AU-23431	AU-23531	AU-24128	AU-24328	AU-24228	AU-24428	AU-24528	AU-24628		AU-24928	AU-24828	AU-25130	AU-25230	AU-25330	AU-25430	AU-25530				
						AU-24129	AU-24329	AU-24229	AU-24429	AU-24529	AU-24629		AU-24929	AU-24829	AU-25131	AU-25231	AU-25331	AU-25431	AU-25531				
COLLAR AU-23000						COLLAR AU-24000											COLLAR AU-25000						
ADD I.D. SIZE TO LINERS						ADD I.D. SIZE TO LINERS											ADD I.D. SIZE TO LINERS						C
5/8	3/4	13/16	7/8	1	1-1/8	5/8	3/4	13/16	7/8	1	1-1/8	1-1/4	1-3/8	1-1/2	1-1/4	1-3/8	1-1/2	1-3/4	2	LINER T.D.			
HNL-235610	HNL-236410	HNL-236410	HNL-238016	HNL-239616	HNL-239624	HNL-245616	HNL-246416	HNL-246416	HNL-248016	HNL-248016	HNL-248816	HNL-249616	HNL-2411216	HNL-2412816	HNL-25100	HNL-25200	HNL-25300	HNL-25400	HNL-25500	HELICAL NURLOCK LINERS			
HNL-1-235610	HNL-1-236410	HNL-1-236410	HNL-1-238016	HNL-1-239616	HNL-1-239624	HNL-1-245616	HNL-1-246416	HNL-1-246416	HNL-1-248016	HNL-1-248016	HNL-1-248816	HNL-1-249616	HNL-1-2411216	HNL-1-2412816	WE RECOMMEND					HELICAL NURLOCK LINERS SINGLE			
			NL-16523	NL-16524							NL-16525				HNL and HNLP					NL-16533			
			NLP-16523	NLP-16524							NLP-16525									STD NURLOCK LINERS			
	LL-23100	LL-23200	LL-23300	LL-23400	LL-23500	LL-24100	LL-24300	LL-24300	LL-24400	LL-24500	LL-24600	LL-24700		LL-24800	LL-25100	LL-25200	LL-25300	LL-25400	LL-25500	LOCK LINERS			
	NL-23100	NL-23200	NL-23300	NL-23400	NL-23500	NL-24100	NL-24300	NL-24300	NL-24400	NL-24500	NL-24600	NL-24700		NL-24800	LLP-25100	LLP-25200	LLP-25300	LLP-25400	LLP-25500	LOCK LINERS			
UDB-521453A	UDB-521452	UDB-521452	UDB-521453	UDB-521454B	UDB-521454A	UDB-521451	UDB-521452	UDB-521452	UDB-521453	UDB-521453	UDB-521454A	UDB-521454B	UDB-521456A	UDB-521457A	UDB-521458A	UDB-521458A	UDB-521458A	UDB-521458A	UDB-521458A	LOCK RINGS			
HNLP-235610	HNLP-236410	HNLP-236410	HNLP-238016	HNLP-239616	HNLP-239624	HNLP-245616	HNLP-246416	HNLP-246416	HNLP-248016	HNLP-248016	HNLP-248816	HNLP-249616	HNLP-2411216	HNLP-2412816	HNLP-25100	HNLP-25200	HNLP-25300	HNLP-25400	HNLP-25500	HELICAL NURLOCK LINERS DOUBLE			
HNLP-1-235610	HNLP-1-236410	HNLP-1-236410	HNLP-1-238016	HNLP-1-239616	HNLP-1-239624	HNLP-1-245616	HNLP-1-246416	HNLP-1-246416	HNLP-1-248016	HNLP-1-248016	HNLP-1-248816	HNLP-1-249616	HNLP-1-2411216	HNLP-1-2412816						HELICAL NURLOCK LINERS SINGLE			
TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-2	TLC-3	TLC-3	TLC-3	TLC-3	TLC-3	TAPERED CLAMPS			
19940	19942	19943	19944	19945	19946	19940	19942	19943	19944	19945	19946	19952	19954	19955	19952	19954	19955	19956	19957	LINER BUSHINGS			
16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16532	16530	16530	16530	16530	16530	LOCK SCREWS			

USE UNITED ULTRA III FOR ULTRA DURABILITY

All AU-25000 series and 16513 Drill Bushing Tips have three milled locking slats. Three Lock Screws are provided in Lock Liner Bushing A-16533. For direct jogg mounting (without lock liner bushing) three Lock Screws must be provided. **Use new HNL and HNLP Liners.**