AeroParts Plus Inc.

helical inserts UNC UNF

UNC *Insert Data*

THREAD SIZE 1	FR PART NUMBER 2	SL PART NUMBER 3	INSERT LENGTH 1D 4	1.5D 5	2D 6	2.5D 7	3D 8	FREE O/DIA. MIN	MAX	NO. FREE COILS 1D 11	1.5D 12	2D 13	2.5D 14	3D 15	PREVAILING TORQUE MAX 16	MIN 17
2-56	1185-02	3585-02	0.086	0.129	0.172	0.215	0.258	0.110	0.119	3.000	5.250	7.375	9.625	11.875	20 oz-in	3 oz-in
3-48	1185-03	3585-03	0.099	0.148	0.198	0.248	0.297	0.128	0.139	2.875	5.000	7.250	9.375	11.500	32 oz-in	7 oz-in
4-40	1185-04	3585-04	0.112	0.168	0.224	0.280	0.336	0.144	0.159	2.750	4.750	6.750	8.875	10.875	48 oz-in	10 oz-in
5-40	1185-05	3585-05	0.125	0.188	0.250	0.312	0.375	0.158	0.173	3.250	5.500	7.750	10.000	12.250	75 oz-in	13 oz-in
6-32	1185-06	3585-06	0.138	0.207	0.276	0.345	0.414	0.178	0.193	2.750	4.750	6.875	8.875	10.875	6 lb-in	1.0 lb-in
8-32	1185-2	3585-2	0.164	0.246	0.328	0.410	0.492	0.205	0.220	3.500	6.000	8.375	10.750	13.250	9 lb-in	1.5 lb-in
10-24	1185-3	3585-3	0.190	0.285	0.380	0.475	0.570	0.244	0.259	2.875	5.000	7.125	9.250	11.375	13 lb-in	2.0 lb-in
12-24	1185-1	3585-1	0.216	0.324	0.432	0.540	0.648	0.270	0.285	3.500	6.000	8.375	10.625	13.125	24 lb-in	3.0 lb-in
1/4-20	1185-4	3585-4	0.250	0.375	0.500	0.625	0.750	0.310	0.330	3.375	5.750	8.000	10.375	12.750	30 lb-in	4.5 lb-in
5/16-18	1185-5	3585-5	0.313	0.469	0.625	0.781	0.781	0.380	0.400	4.000	6.625	9.250	11.875	14.625	60 lb-in	7.5 lb-in
3/8-16	1185-6	3585-6	0.375	0.563	0.750	0.938	1.125	0.452	0.472	4.375	7.250	10.000	12.875	15.750	80 lb-in	12.0 lb-in
7/16-14	1185-7	3585-7	0.438	0.656	0.875	1.094	1.313	0.526	0.551	4.500	7.375	10.250	13.125	16.125	100 lb-in	16.5 lb-in
1/2-13	1185-8	3585-8	0.500	0.750	1.000	1.250	1.500	0.597	0.622	4.875	7.875	11.000	14.125	17.125	150 lb-in	24.0 lb-in
9/16-12	1185-9	3585-9	0.563	0.844	1.125	1.406	1.688	0.669	0.694	5.125	8.250	11.500	14.750	17.875	200 lb-in	30.0 lb-in
5/8-11	1185-10	3585-10	0.625	0.938	1.250	1.563	1.875	0.742	0.767	5.250	8.500	11.750	15.000	18.375	300 lb-in	40.0 lb-in
3/4-10	1185-12	3585-12	0.750	1.125	1.500	1.875	2.250	0.881	0.906	5.875	9.375	13.000	16.500	20.125	400 lb-in	60.0 lb-in
7/8-9	1185-14	3585-14	0.875	1.313	1.750	2.188	2.625	1.022	1.052	6.250	10.000	13.750	17.500	21.250	600 lb-in	82.0 lb-in
1-8	1185-16	3585-16	1.000	1.500	2.000	2.500	3.000	1.166	1.196	6.375	10.125	14.000	17.750	21.625	800 lb-in	110.0 lb-in
1-1/8-7	1185-18	3585-18	1.125	1.688	2.250	2.813	3.375	1.315	1.355	6.125	9.875	13.625	17.500	21.250	900 lb-in	137.0 lb-in
1-1/4-7	1185-20	3585-20	1.250	1.875	2.500	3.125	3.750	1.443	1.483	7.000	11.250	15.375	19.500	23.750	1000 lb-in	165.0 lb-in
1-3/8-6	1185-22	3585-22	1.375	2.063	2.750	3.438	4.125	1.598	1.643	6.500	10.500	14.375	18.375	22.250	1150 lb-in	185.0 lb-in
1-1/2-6	1185-24	3585-24	1.500	2.250	3.000	3.750	4.500	1.727	1.772	7.250	11.500	15.875	20.125	24.500	1350 lb-in	210.0 lb-in

UNF *Insert Data*

THREAD SIZE 1	FR PART NUMBER 2	SL PART NUMBER 3	INSERT LENGTH 1D 4	1.5D 5	2D 6	2.5D 7	3D 8	FREE O/DIA. MIN	MAX	NO. FREE COILS 1D 11	1.5D 12	2D 13	2.5D 14	3D 15	PREVAILING TORQUE MAX 16	MIN 17
2-64	1191-02	3591-02	0.086	0.129	0.172	0.215	0.258	0.110	0.119	3.500	5.875	8.375	10.750	13.125	20 oz-in	3 oz-in
3-56	1191-03	3591-03	0.099	0.148	0.198	0.248	0.297	0.131	0.146	3.375	5.625	8.000	10.375	12.625	32 oz-in	7 oz-in
4-48	1191-04	3591-04	0.112	0.168	0.224	0.280	0.336	0.147	0.162	3.375	5.625	7.875	10.250	12.500	48 oz-in	10 oz-in
5-44	1191-05	3591-05	0.125	0.188	0.250	0.312	0.375	0.163	0.178	3.563	5.938	8.313	10.750	13.125	75 oz-in	13 oz-in
6-40	1191-06	3591-06	0.138	0.207	0.276	0.345	0.414	0.173	0.193	3.500	6.000	8.375	10.750	13.250	6 lb-in	1.0 lb-in
8-36	1191-2	3591-2	0.164	0.246	0.328	0.410	0.492	0.204	0.224	3.875	6.500	9.125	11.625	14.250	9 lb-in	1.5 lb-in
10-32	1191-3	3591-3	0.190	0.285	0.380	0.475	0.570	0.236	0.256	4.125	6.875	9.500	12.250	14.875	13 lb-in	2.0 lb-in
1/4-28	1191-4	3591-4	0.250	0.375	0.500	0.625	0.750	0.306	0.326	5.000	8.250	11.375	14.500	17.625	30 lb-in	3.5 lb-in
5/16-24	1191-5	3591-5	0.313	0.469	0.625	0.781	0.938	0.380	0.400	5.500	8.875	12.250	15.625	19.000	60 lb-in	6.5 lb-in
3/8-24	1191-6	3591-6	0.375	0.563	0.750	0.938	1.125	0.448	0.468	6.875	11.000	15.000	19.125	23.125	80 lb-in	9.5 lb-in
7/16-20	1191-7	3591-7	0.438	0.656	0.875	1.094	1.313	0.524	0.549	6.625	10.625	14.625	18.500	22.500	100 lb-in	14.0 lb-in
1/2-20	1191-8	3591-8	0.500	0.750	1.000	1.250	1.500	0.592	0.617	7.875	12.375	16.875	21.375	25.875	150 lb-in	18.0 lb-in
9/16-18	1191-9	3591-9	0.563	0.844	1.125	1.406	1.688	0.666	0.691	8.000	12.500	17.125	21.750	26.250	200 lb-in	24.0 lb-in
5/8-18	1191-10	3591-10	0.625	0.938	1.250	1.563	1.875	0.733	0.758	9.000	14.125	19.250	24.250	29.375	300 lb-in	32.0 lb-in
3/4-16	1191-12	3591-12	0.750	1.125	1.500	1.875	2.250	0.876	0.901	9.750	15.125	20.625	26.000	31.500	400 lb-in	50.0 lb-in
7/8-14	1191-14	3591-14	0.875	1.313	1.750	2.188	2.625	1.021	1.051	9.875	15.500	21.125	26.625	32.250	600 lb-in	70.0 lb-in
1-12	1191-161	3591-161	1.000	1.500	2.000	2.500	3.000	1.169	1.199	9.625	15.000	20.500	26.000	31.500	800 lb-in	90.0 lb-in
1-1/8-12	1191-18	3591-18	1.125	1.688	2.250	2.813	3.375	1.304	1.334	11.125	17.250	23.375	29.500	35.750	900 lb-in	117.0 lb-in
1-1/4-12	1191-20	3591-20	1.250	1.875	2.500	3.125	3.750	1.439	1.469	12.500	19.375	26.250	33.000	39.875	1000 lb-in	143.0 lb-in
1-3/8-12	1191-22	3591-22	1.375	2.063	2.750	3.438	4.125	1.575	1.610	13.750	21.375	28.875	36.500	44.000	1150 lb-in	165.0 lb-in
1-1/2-12	1191-24	3591-24	1.500	2.250	3.000	3.750	4.500	1.710	1.745	15.250	23.500	31.625	39.875	48.125	1350 lb-in	190.0 lb-in

ORDERING EXAMPLE: 1191-8CNPX0.500

1191-8 CN P X0.500

INSERT TYPE:
1185 UNC FR
385 UNC SL
1191 UNF FR
3591 UNC SL

FR - Free Running
SL - Screw Lock

MATERIAL TYPE:
CN Stainless Steel
N90N Nimonic 90
TN Inconel
EN Nitronic 60
PB Phosphor Bronze

MATERIAL FINISH:
BLANK None
P Cadmium Plate
V Silver Plate
Z Zinc Plate
W Dry Film Lubricant

INSERT LENGTH:
Per insert length charts

INSTALLATION TOOLS

- Rough Taps
- Finish Taps
- Bottoming Taps
- Spiral Flute
- Spiral Point

Class 2B and 3B GoNoGo gauges for all UNC and UNF thread sizes.

- Basic Hand Tool
- Prewind Inserting Tool
  Dedicated size; easy install
- Universal Inserting Tool
  Interchangeable mandrels for versatility
- T-Bar RD
  For reduced diameter inserts

All our tools and inserts are also available in Metric sizes.

For more information on any of our products or services please visit us on the Web at: www.aeroparts-plus.com

- Full range of High Quality Inserting tools for all applications and any volume.
- Precision STI Hand Taps and Machine Taps for all your job requirements.
- Precision Gauges for strict tolerance work and precision inspection.
- Pneumatic and Electric tools also available for high volume and strip feed applications.

HeliCal Inserts provide positive means for protecting and strengthening all tapped threads. They are mirror-smooth, reinforced internal threads of cold rolled 18-8 stainless steel, of hardness 43-50Rc, or other specialized material, with hardness far in excess of the usual tapped materials.

The outstanding engineering features of HeliCal inserts have established their widespread use in the fields of aerospace, industrial and military equipment manufactures.

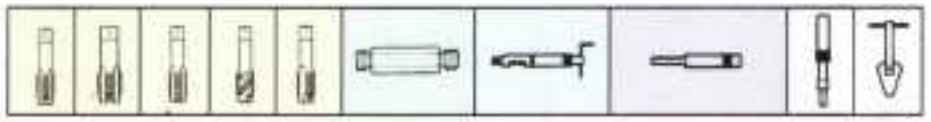
AeroParts Plus™

12 Gregory Drive, Unit 1
South Burlington, VT 05403
Phone 802.489.5023
Fax 802.489.5024

TOOL SELECTION CHART

UNC

THREAD SIZE	SCREW THREAD INSERT TAPS					THREAD GAUGES		INSERTING TOOL		TANG BREAK OFF		AUTO TANG BREAK OFF	EXTRACTION TOOL
	Rough	Finish	Bottom	Spiral Flute	Spiral Point	Class 2B	Class 3B	FR	SL	FR	SL	FR	
2-56	02CRU	02CPB	02CBB	02CS	02CSB	1440-02	1698-02	ST501		TBO-50		ATB-50	
3-48	03CRU	03CPB	03CBB	03CS	03CSB	1440-03	1698-03	528-03		TBO-51		ATB-50	
4-40	04CRU	04CPB	04CBB	04CS	04CSB	1440-04	1698-04	ST1104	ST1104	TBO-51	TBO-50	ATB-51	1227-06
5-40	05CRU	05CPB	05CBB	05CS	05CSB	1440-05	1698-05	528-05	551-05	TBO-52	TBO-52	ATB-51	1227-06
6-32	06CRU	06CPB	06CBB	06CS	06CSB	1440-06	1698-06	ST1103	ST1103	TBO-52	TBO-52	ATB-52	1227-06
8-32	2CRU	2CPB	2CBB	2CS	2CSB	1440-2	1698-2	ST980	ST980	TBO-54	TBO-53	ATB-53	1227-06
10-24	3CRU	3CPB	3CBB	3CS	3CSB	1440-3	1698-3	ST1101	ST1101	TBO-55	TBO-54	ATB-54	1227-6
12-24	1CRU	1CPB	1CBB	1CS	1CSB	1440-1	1698-1	528-1	551-1	TBO-56	TBO-56	ATB-54	1227-6
1/4-20	4CRU	4CPB	4CBB	4CS	4CSB	1440-4	1698-4	528-4	551-4	TBO-56	TBO-71	ATB-55	1227-6
5/16-18	5CRU	5CPB	5CBB	5CS	5CSB	1440-5	1698-5	528-5	551-5	TBO-57	TBO-57	ATB-57	1227-6
3/8-16	6CRU	6CPB	6CBB	6CS	6CSB	1440-6	1698-6	528-6	551-6	TBO-58	TBO-58	ATB-58	1227-6
7/16-14	7CRU	7CPB	7CBB	7CS	7CSB	1440-7	1698-7	528-7	551-7	TBO-58	TBO-63	ATB-63	1227-16
1/2-13	8CRU	8CPB	8CBB	8CS	8CSB	1440-8	1698-8	528-8	551-8	TBO-58	TBO-67	ATB-67	1227-16
9/16-12	9CRU	9CPB	9CBB	9CS	9CSB	1440-9	1698-9	528-9	528-9	1195-9	1195-9		1227-16
5/8-11	10CRU	10CPB	10CBB	10CS	10CSB	1440-10	1698-10	528-10	528-10	1195-10	1195-10		1227-16
3/4-10	12CRU	12CPB	12CBB	12CS	12CSB	1440-12	1698-12	528-12	528-12	1195-12	1195-12		1227-16
7/8-9	14CRU	14CPB	14CBB	14CS	14CSB	1440-14	1698-14	CH-14		1195-14	USE PLIERS		1227-16
1-8	16CRU	16CPB	16CBB	16CS	16CSB	1440-16	1698-16	CH-16		1195-16	USE PLIERS		1227-16
1-1/8-7	18CRU	18CPB	18CBB	18CS	18CSB	1440-18	1698-18	CH-18		USE PLIERS	USE PLIERS		1227-24
1-1/4-7	20CRU	20CPB	20CBB	20CS	20CSB	1440-20	1698-20	CH-20		USE PLIERS	USE PLIERS		1227-24
1-3/8-6	22CRU	22CPB	22CBB	22CS	22CSB	1440-22	1698-22	CH-22		USE PLIERS	USE PLIERS		1227-24
1-1/2-6	24CRU	24CPB	24CBB	24CS	24CSB	1440-24	1698-24	CH-24		USE PLIERS	USE PLIERS		1227-24



UNF

THREAD SIZE	SCREW THREAD INSERT TAPS					THREAD GAUGES		INSERTING TOOL		TANG BREAK OFF		AUTO TANG BREAK OFF	EXTRACTION TOOL
	Rough	Finish	Bottom	Spiral Flute	Spiral Point	Class 2B	Class 3B	FR	SL	FR	SL	FR	
2-64	02FRU	02FPB	02FBB	02FS	02FSB	1441-02	1694-02	ST1307	ST1307	TBO-50	TBO-50	ATB-50	1227-06
3-56	03FRU	03FPB	03FBB	03FS	03FSB	1441-03	1694-03	ST1312	ST1312	TBO-51	TBO-51	ATB-50	1227-06
4-48	04FRU	04FPB	04FBB	04FS	04FSB	1441-04	1694-04	9803-04	9803-04	TBO-52	TBO-52	ATB-51	1227-06
5-44	05FRU	05FPB	05FBB	05FS	05FSB	1441-05	1694-05	9803-05	9803-05	TBO-52	TBO-52	ATB-51	1227-06
6-40	06FRU	06FPB	06FBB	06FS	06FSB	1441-06	1694-06	9803-06	9803-06	TBO-53	TBO-52	ATB-52	1227-06
8-36	2FRU	2FPB	2FBB	2FS	2FSB	1441-2	1694-2	9803-2	9803-2	TBO-54	TBO-53	ATB-53	1227-06
10-32	3FRU	3FPB	3FBB	3FS	3FSB	1441-3	1694-3	9803-3	9803-3	TBO-55	TBO-54	ATB-54	1227-6
1/4-28	4FRU	4FPB	4FBB	4FS	4FSB	1441-4	1694-4	9803-4	9803-4	TBO-56	TBO-71	ATB-55	1227-6
5/16-24	5FRU	5FPB	5FBB	5FS	5FSB	1441-5	1694-5	9803-5	9803-5	TBO-57	TBO-57	ATB-57	1227-6
3/8-24	6FRU	6FPB	6FBB	6FS	6FSB	1441-6	1694-6	9803-6	9803-6	TBO-60	TBO-60	ATB-60	1227-6
7/16-20	7FRU	7FPB	7FBB	7FS	7FSB	1441-7	1694-7	9803-7	9803-7	TBO-60	TBO-64	ATB-64	1227-16
1/2-20	8FRU	8FPB	8FBB	8FS	8FSB	1441-8	1694-8	9803-8	9803-8	TBO-60	TBO-60	ATB-60	1227-16
9/16-18	9FRU	9FPB	9FBB	9FS	9FSB	1441-9	1694-9	535-9	535-9	1196-9	1196-9		1227-16
5/8-18	10FRU	10FPB	10FBB	10FS	10FSB	1441-10	1694-10	535-10	535-10	1196-10	1196-10		1227-16
3/4-16	12FRU	12FPB	12FBB	12FS	12FSB	1441-12	1694-12	535-12	535-12	1196-12	1196-12		1227-16
7/8-14	14FRU	14FPB	14FBB	14FS	14FSB	1441-14	1694-14	535-14	535-14	1196-14	USE PLIERS		1227-16
1-12	16FRU	16FPB	16FBB	16FS	16FSB	1441-16	1694-16	535-16	535-16	1196-16	USE PLIERS		1227-16
1-1/8-12	18FRU	18FPB	18FBB	18FS	18FSB	1441-18	1694-18	535-18	535-18	USE PLIERS	USE PLIERS		1227-24
1-1/4-12	20FRU	20FPB	20FBB	20FS	20FSB	1441-20	1694-20	535-20	535-20	USE PLIERS	USE PLIERS		1227-24
1-3/8-12	22FRU	22FPB	22FBB	22FS	22FSB	1441-22	1694-22	535-22	535-22	USE PLIERS	USE PLIERS		1227-24
1-1/2-12	24FRU	24FPB	24FBB	24FS	24FSB	1441-24	1694-24	535-24	535-24	USE PLIERS	USE PLIERS		1227-24

High Temperature Aerospace Applications:

Wire thread inserts for use in high temperature applications are available in NIMONIC 90 manufactured to Aerospace Standards with S.B.A.C. qualifications.

To order Nimonic 90 inserts to Aerospace standards request the following AGS part numbers.

SBAC *NIMONIC 90*

SIZE	1D	1.5D	2D	2.5D	3D
10-32	AGS3706	AGS3731	AGS3756	AGS3781	AGS3718
1/4-28	AGS3707	AGS3732	AGS3757	AGS3782	AGS3719
5/16-24	AGS3708	AGS3733	AGS3758	AGS3783	AGS3720
3/8-24	AGS3709	AGS3734	AGS3759	AGS3784	AGS3721
7/16-20	AGS3710	AGS3735	AGS3760	AGS3785	AGS3722
1/2-20	AGS3711	AGS3736	AGS3761	AGS3786	AGS3723
9/16-18	AGS3712				
5/8-18	AGS3713				

Specific installation tooling detailed below must be used in order to S.B.A.C. performance specifications.

SBAC *NIMONIC 90 TOOLING*

SIZE	INSERT TOOL	TANG BRK OFF	EXTRATION TOOL
10-32	ST1062	3581-3(-3)	1227-6
1/4-28	ST1088	3581-4(-3)	1227-6
5/16-24	ST1089	3581-5(-3)	1227-6
3/8-24	ST1090	3581-6(-3)	1227-6
7/16-20	ST1091	3581-7(-3)	1227-16
1/2-20	ST1092	3581-8(-3)	1227-16
9/16-18	ST1130	1196-9(-3)	1227-16
5/8-18	ST1099	1196-10(-3)	1227-16

Insert Materials

18-8 Stainless Steel
Standard, general purpose material. For use as original equipment or thread repair.

Nimonic 90
High temperature applications up to 650C.

Inconel X750
High temperature applications up to 550C

Nitronic 60
Stainless steel alloy with high galling and pitting resistance.

Phosphor Bronze
Salt water applications,. Non-magnetic, excellent electrical conductivity

Surface Finishes

Cadmium Plating
DEF STAN 03-19 : QQ-P-416
Provides high corrosion resistance and lubrication to prevent galling. Up to 250°C

Silver Plating
DEF STAN 03-9 : BS2816:1989
To reduce galling of threads at high temperatures.

Zinc Plating
DEF STAN 03-20
Provides corrosion resistance as an alternative to Cadmium.

Dry Film Lubricated
MIL-L-8937
Additional lubrication in high friction applications. Recommended for use with Screw Lock inserts.

INSERTS SUPERIORITY

HeliCal Inserts provide positive means for protecting and strengthening all tapped threads.

They are mirror-smooth, reinforced internal threads of cold rolled 18-8 stainless steel, of hardness 43-50Rc, or other specialized material, with hardness for in excess of the usual tapped materials

The outstanding engineering features of HeliCal inserts have established their widespread use in the fields of aerospace, industrial and military equipment manufactures.

INSERTS FLEXIBILTY

Maximum design flexibility as well as compliance with conventional engineering practice gives the designer unlimited opportunities to use HeliCal Insert assemblies.

Five lengths of insert for each thread size are available; lengths of 1, 1.5, 2, 2.5 and 3 times the normal thread diameter.

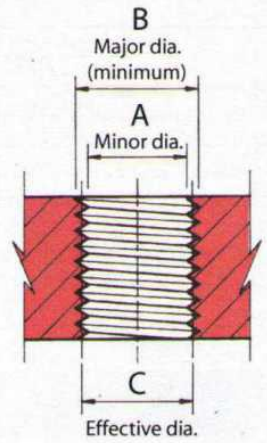
This choice of insert length offers the designer the opportunity to balance the tensile strength of the bolt against the shear strength of the parent material. combinations of bolt and parent materials.

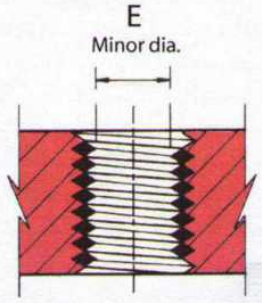
INSERTS VARIETY

The variety of insert lengths also aids the designer to conform to the conventional engineering practice of assuring bolt failure rather than damage to the parent material when the assembly is subjected to destructive loads.

A table has been prepared to assist the designer in his choice of thread engagements for different combinations of bolt and parent materials

UNC To BS 3409		TAPPED HOLE				FITTED MINOR DIA.
		MINOR DIA. MAX - MIN	MAJOR DIA.	CLASS 2B MAX - MIN	CLASS 3B MAX - MIN	
SIZE	DRILL	A	B	C	C	E
2-64	2.3MM	0.094 - 0.090	0.1092	0.0996 - 0.0976	0.0989 - 0.0976	0.0667
3-48	2.7MM	0.108 - 0.104	0.1261	0.1147 - 0.1125	0.1139 - 0.1125	0.0764
4-40	3MM	0.122 - 0.118	0.1445	0.1307 - 0.1282	0.1298 - 0.1282	0.0849
5-40	3.4MM	0.135 - 0.131	0.1575	0.1437 - 0.1412	0.1429 - 0.1412	0.0979
6-32	3.7MM	0.150 - 0.145	0.1786	0.1611 - 0.1583	0.1601 - 0.1583	0.1042
8-32	11/64	0.175 - 0.171	0.2046	0.1872 - 0.1843	0.1862 - 0.1843	0.1302
10-24	5.1MM	0.205 - 0.199	0.2441	0.2204 - 0.2171	0.2193 - 0.2171	0.1449
12-24	5.8MM	0.230 - 0.225	0.2701	0.2465 - 0.2431	0.2454 - 0.2431	0.1709
1/4-20	6.7MM	0.270 - 0.261	0.3150	0.2863 - 0.2825	0.2851 - 0.2825	0.1959
5/16-18	8.3MM	0.334 - 0.325	0.3847	0.3529 - 0.3486	0.3515 - 0.3486	0.2524
3/8-16	9.9MM	0.398 - 0.389	0.4562	0.4203 - 0.4156	0.4189 - 0.4156	0.3073
7/16-14	29/64	0.463 - 0.453	0.5303	0.4890 - 0.4839	0.4875 - 0.4839	0.3602
1/2-13	33/64	0.527 - 0.517	0.5999	0.5554 - 0.5499	0.5537 - 0.5499	0.4167
9/16-12	14.75MM	0.591 - 0.581	0.6708	0.6225 - 0.6167	0.6208 - 0.6167	0.4723
5/8-11	16.5MM	0.656 - 0.645	0.7431	0.6903 - 0.6841	0.6885 - 0.6841	0.5266
3/4-10	19.75MM	0.783 - 0.772	0.8799	0.8216 - 0.8149	0.8196 - 0.8149	0.6417
7/8-9	23MM	0.912 - 0.899	1.0193	0.9543 - 0.9471	0.9522 - 0.9471	0.7547
1-8	1-1/32	1.042 - 1.027	1.1624	1.0890 - 1.0812	1.0868 - 1.0812	0.8647
1-1/8-7	1-5/32	1.170 - 1.156	1.3106	1.2262 - 1.2178	1.2239 - 1.2178	0.9704
1-1/4-7	1-9/32	1.295 - 1.281	1.4356	1.3514 - 1.3428	1.3490 - 1.3428	1.0954
1-3/8-6	36MM	1.431 - 1.411	1.5914	1.4926 - 1.4832	1.4900 - 1.4832	1.1946
1-1/2-6	1-35/64	1.556 - 1.536	1.7164	1.6177 - 1.6082	1.6151 - 1.6082	1.3196





UNF To BS 3409		TAPPED HOLE				FITTED MINOR DIA.
		MINOR DIA. MAX - MIN	MAJOR DIA.	CLASS 2B MAX - MIN	CLASS 3B MAX - MIN	
SIZE	DRILL	A	B	C	C	E
2-64	2.3MM	0.093 - 0.090	0.1063	0.0980 - 0.0962	0.0974 - 0.0962	0.0691
3-56	2.65MM	0.106 - 0.103	0.1222	0.1126 - 0.1106	0.1119 - 0.1106	0.0797
4-48	3MM	0.120 - 0.117	0.1391	0.1278 - 0.1255	0.1270 - 0.1255	0.0894
5-44	3.3MM	0.134 - 0.130	0.1545	0.1422 - 0.1398	0.1414 - 0.1398	0.1004
6-40	3.7MM	0.148 - 0.144	0.1705	0.1568 - 0.1542	0.1559 - 0.1542	0.1109
8-36	11/64	0.174 - 0.170	0.2001	0.1848 - 0.1820	0.1839 - 0.1820	0.1339
10-32	5.1MM	0.201 - 0.197	0.2306	0.2133 - 0.2103	0.2123 - 0.2103	0.1562
1/4-28	6.6MM	0.264 - 0.258	0.2964	0.2765 - 0.2732	0.2754 - 0.2732	0.2113
5/16-24	8.2MM	0.328 - 0.322	0.3666	0.3433 - 0.3395	0.3421 - 0.3395	0.2674
3/8-24	9.8MM	0.390 - 0.384	0.4291	0.4059 - 0.4020	0.4047 - 0.4020	0.3299
7/16-20	29/64	0.456 - 0.449	0.5025	0.4744 - 0.4700	0.4731 - 0.4700	0.3834
1/2-20	33/64	0.518 - 0.511	0.5650	0.5371 - 0.5325	0.5357 - 0.5325	0.4459
9/16-18	37/64	0.582 - 0.575	0.6347	0.6035 - 0.5986	0.6020 - 0.5986	0.5024
5/8-18	41/64	0.644 - 0.637	0.6972	0.6661 - 0.6611	0.6646 - 0.6611	0.5649
3/4-16	49/64	0.771 - 0.764	0.8312	0.7961 - 0.7906	0.7945 - 0.7906	0.6823
7/8-16	22.75MM	0.899 - 0.891	0.9678	0.9274 - 0.9214	0.9257 - 0.9214	0.7977
1-12	26MM	1.028 - 1.018	1.1083	1.0608 - 1.0542	1.0589 - 1.0542	0.9098
1-1/8-12	29.25MM	1.153 - 1.143	1.2333	1.1860 - 1.1792	1.1841 - 1.1792	1.0348
1-1/4-12	1-17/64	1.278 - 1.268	1.3583	1.3112 - 1.3042	1.3092 - 1.3042	1.1598
1-3/8-12	35.5MM	1.403 - 1.393	1.4833	1.4364 - 1.4292	1.4343 - 1.4292	1.2848
1-1/2-12	38.5MM	1.528 - 1.518	1.6083	1.5615 - 1.5542	1.5595 - 1.5542	1.4098

AeroParts Plus Inc.

12 Gregory Drive, Unit 1
S. Burlington VT 05403-6058

Tel: 802.489.5023
Fax: 802.489.5024