



PART NUMBER	NOM DIA	A DIA THEO.	A' DIA MIN.	C REF	D DIA	E DIA MAX	F FLATS	H REF	J DIA MIN	K MAX	L REF	M	N	R MAX	V GAGE PROT	W GAGE DIA	Z MAX	
BG2042(-)06(-)	3/16				.1895 .1885	.1875		.081	.290		.850							
BG2042(-)06(-)X	13/64	.385 .378	.342	5/16	.2026 .2016	.1995	.112 .109	.077	.300	.750		.315 .305	.047 .044	.030	.0239 .0212	.3272 .3270	.015	
BG2042(-)06(-)Y	7/32				.2182 .2172	.2150						.900						
BG2042(-)08(-)	1/4				.2495 .2485	.2470						.980						
BG2042(-)08(-)X	17/64	.507 .499	.463	3/8	.2651 .2641	.2620	.135 .131	.104	.400	.800		.435 .425	.055 .050	.040	.0310 .0282	.4320 .4318		
BG2042(-)08(-)Y	9/32				.2807 .2797	.2775		.097				1.040						
BG2042(-)10(-)	5/16				.3120 .3110	.3090		.136	.475			1.100						
BG2042(-)10(-)X	21/64	.635 .626	.577	7/16	.3276 .3266	.3245	.152 .149	.129	.495	.950		.520 .510	.068 .063	.040	.0405 .0365	.5389 .5385		
BG2042(-)10(-)Y	11/32				.3432 .3422	.3400		.122	.515			1.200						
BG2042(-)12(-)	3/8				.3745 .3735	.3715		.162	.560			1.250						
BG2042(-)12(-)X	25/64	.762 .752	.696	7/16	.3901 .3891	.3870	.184 .181	.155	.580	1.100		.622 .612	.082 .077	.040	.0458 .0415	.6532 .6528		
BG2042(-)12(-)Y	13/32				.4057 .4047	.4025		.148	.600			1.320						
BG2042(-)14(-)	7/16	.890 .882	.830			.4370 .4360	.4335	.220 .217	.190	.660	1.250		.640 .630		.094 .089	.050		.0966 .0924
BG2042(-)16(-)	1/2	1.015 1.007	.960	1/2	.4995 .4985	.4955	.256 .253	.216	.720	1.350		.740 .730	.106 .101		.1496 .1463			.6582 .6580

PART NUMBER	MIN AVAILABLE GRIP DASH NO.	RECOMMENDED HOLE SIZE FOR:		PREVAILING TORQUE (IN-LBS) MIN	DOUBLE SHEAR (LBS) MIN	TENSILE STRENGTH (LBS) MIN	BREAK-OFF LIMITS MAX
		CLEARANCE INSTALLATION	INTERFERENCE INSTALLATION				
BG2042(-)06(-)	-03	.192 .190	.1890 .1875	4	6300	1600	.015
BG2042(-)06(-)X		.205 .203	.2015 .1997				
BG2042(-)06(-)Y		.2205 .2185	.2171 .2152				
BG2042(-)08(-)		.252 .250	.2489 .2472	6	11000	3000	
BG2042(-)08(-)X		.268 .266	.2640 .2622				
BG2042(-)08(-)Y		.2835 .2815	.2796 .2777				
BG2042(-)10(-)		.315 .313	.3110 .3092	8	17130	5000	
BG2042(-)10(-)X		.3305 .3285	.3265 .3247				
BG2042(-)10(-)Y		.346 .344	.3421 .3402				
BG2042(-)12(-)		.377 .375	.3735 .3717	10	24700	7000	
BG2042(-)12(-)X		.393 .391	.3891 .3872				
BG2042(-)12(-)Y		.409 .407	.4047 .4027				
BG2042(-)14(-)	.440 .438	.4360 .4340	12	33600	9500		
BG2042(-)16(-)	.502 .500	.4985 .4965					

EXAMPLE OF PART NUMBER:

BG2042(-)08-09(-)

DESIGNATION: " " = NOMINAL DIA  
 "X" = 1/64" OVERSIZE  
 "Y" = 1/32" OVERSIZE  
 DESIGNATES MAX GRIP IN 1/16" INCREMENTS  
 DESIGNATES BASIC DIMENSIONS  
 DESIGNATES SPECIAL CODE  
 DESIGNATES BASIC PART NUMBER

U.S. PATENT NO.: 5,498,110; 5,634,751 AND FOREIGN PATENTS PENDING

<p>MONOGRAM AEROSPACE FASTENERS a TriMas company 3423 SOUTH GARFIELD AVENUE COMMERCE, CALIFORNIA 90040 (323) 722-4760 FAX (323) 727-1029</p>	TITLE:	OSI BOLT™ 100° FLUSH TENSION HEAD CLOSE TOLERANCE SHANK INCONEL 718, 112 KSI SHEAR 1/16" GRIP VARIATION		DRAWING NO:	BG2042(-)(-)(-)(-)			
				DRAWN BY:	M. DOMINGUEZ	DRAWN DATE:	07-12-13	
				APPROVED BY:			CHECKED DATE:	
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PART NUMBER	COMPONENTS							
	BODY		SLEEVE		NUT		COREBOLT	
	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH
BG2042(-)-(-)( )	INCO 718 PER AMS5662 HEAT TREATED TO 125 KSI FSU MINIMUM	PASSIVATE PER AMS-QQ-P-35 OR BAC5758 & ALUMINUM COAT PER BMS-10-85 TYPE I, CLASS A	304 SS PER AMS5639 FULLY ANNEALED	CAD PLATE PER AMS-QQ-P-416 TYPE II, CLASS 1	A286 CRES PER AMS5732 OR AMS5737: HEAT TREATED TO 160 KSI MIN TENSILE <b>EXCEPT:</b> FOR -.08 DIA NOMINAL SIZE ONLY, INCO 718 PER AMS5662 HEAT TREATED TO 125 KSI MIN	CAD PLATE PER AMS-QQ-P-416 TYPE II, CLASS 1	INCO 718 PER AMS5662 HEAT TREATED TO 125 KSI FSU MINIMUM	PASSIVATE PER AMS-QQ-P-35 OR BAC5758
BG2042A(-)-(-)( )	INCO 718 PER AMS5662 HEAT TREATED TO 125 KSI FSU MINIMUM	PASSIVATE PER AMS-QQ-P-35 OR BAC5758 & ALUMINUM COAT PER BMS-10-85 TYPE I, CLASS A	304 SS PER AMS5639 FULLY ANNEALED	CAD PLATE PER AMS-QQ-P-416 TYPE II, CLASS 1		PASSIVATE PER AMS-QQ-P-35 OR BAC5758	INCO 718 PER AMS5662 HEAT TREATED TO 125 KSI FSU MINIMUM	PASSIVATE PER AMS-QQ-P-35 OR BAC5758
BG2042B(-)-(-)( )	INCO 718 PER AMS5662 HEAT TREATED TO 125 KSI FSU MINIMUM	PASSIVATE PER AMS-QQ-P-35 OR BAC5758 & ALUMINUM COAT PER BMS-10-85 TYPE I, CLASS A	304 SS PER AMS5639 FULLY ANNEALED	PASSIVATE PER AMS-QQ-P-35 OR BAC5758		PASSIVATE PER AMS-QQ-P-35 OR BAC5758	INCO 718 PER AMS5662 HEAT TREATED TO 125 KSI FSU MINIMUM	PASSIVATE PER AMS-QQ-P-35 OR BAC5758
BG2042C(-)-(-)( )	INCO 718 PER AMS5662 HEAT TREATED TO 125 KSI FSU MINIMUM	PASSIVATE PER AMS-QQ-P-35 OR BAC5758	304 SS PER AMS5639 FULLY ANNEALED	PASSIVATE PER AMS-QQ-P-35 OR BAC5758		PASSIVATE PER AMS-QQ-P-35 OR BAC5758	INCO 718 PER AMS5662 HEAT TREATED TO 125 KSI FSU MINIMUM	PASSIVATE PER AMS-QQ-P-35 OR BAC5758

INSTALLATION SPECIFICATION: BG2003  
 PROCUREMENT SPECIFICATION: BG2000

GENERAL NOTES:

- LUBRICANT: DRY FILM LUBE PER THE CHEMICAL REQUIREMENTS OF MIL-L-46010 TYPE I, AND/OR PARAFFIN WAX USED AS REQUIRED FOR PERFORMANCE.
- LOCKING FEATURE CONSISTS OF THREE (3) INDENTATIONS LOCATED 120° APART ON THE PERIPHERY OF THE NUT COMPONENT.
- SEE BG2003 FOR INSTALLATION AND REMOVAL INFORMATION.
- GRIP LENGTHS NOT LISTED MAY BE AVAILABLE UPON REQUEST.
- INSTALLATION HOLE SHALL BE RADIUS TO CLEAR HEAD TO SHANK RADIUS.
- ALL DIMENSIONS TO BE MET AFTER FINISH AND BEFORE LUBRICATION.
- CONICAL SURFACE OF HEAD SHALL BE CONCENTRIC TO SHANK DIAMETER WITHIN .005 T.I.R.
- INSERT FABRICATED FROM ACETAL PLASTIC PER ASTM-D-4181.

2ND DASH NO.	GRIP RANGE (INCHES)		2ND DASH NO.	GRIP RANGE (INCHES)	
	MIN GRIP	MAX GRIP		MIN GRIP	MAX GRIP
-02	.063	.125	-18	1.063	1.125
-03	.126	.187	-19	1.126	1.187
-04	.188	.250	-20	1.188	1.250
-05	.251	.312	-21	1.251	1.312
-06	.313	.375	-22	1.313	1.375
-07	.376	.437	-23	1.376	1.437
-08	.438	.500	-24	1.438	1.500
-09	.501	.562	-25	1.501	1.562
-10	.563	.625	-26	1.563	1.625
-11	.626	.687	-27	1.626	1.687
-12	.688	.750	-28	1.688	1.750
-13	.751	.812	-29	1.751	1.812
-14	.813	.875	-30	1.813	1.875
-15	.876	.937	-31	1.876	1.937
-16	.938	1.000	-32	1.938	2.000
-17	1.001	1.062			

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		DRAWN BY: M. DOMINGUEZ	DRAWN DATE: 07-12-13
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